THE

NAUTICAL ALMANAC

AND

ASTRONOMICAL EPHEMERIS,

FOR THE YEAR 1774.

Publiſhed by ORDER of the

COMMISSIONERS OF LONGITUDE.

LONDON:
Printed by RICHARDSON and C°.
PRINTERS;
AND SOLD BY
J. NOURSE, in the Strand, and Meſſ. MOUNT and PAGE
on Tower-Hill,
Bookſellers to the ſaid COMMISSIONERS.
M DCC LXXII.
[Price Three Shillings and Six Pence.]

BIBLIOTHECA·BODLEI

EXTRACT from the Act of Parliament concerning the Longitude, made in the Fifth Year of the Reign of his preſent Majeſty.

WHEREAS the Publication of Nautical Almanacs conſtructed by proper Perſons, under the Direction of the ſaid Commiſſioners, would greatly contribute to make the ſaid Lunar Tables more generally uſeful; Be it further Enacted, by the Authority aforeſaid, That it ſhall and may be lawful to and for the ſaid Commiſſioners to cauſe ſuch Nautical Almanacs, or other uſeful Tables, to be conſtructed, and to print, publiſh, and vend, or cauſe to be printed, publiſhed, and vended, any Nautical Almanac or Almanacs, or other uſeful Table or Tables, which they, or the major Part of them, ſhall, from time to time, judge neceſſary and uſeful, in order to facilitate the Method of diſcovering the Longitude at Sea; any Law, Statute, excluſive Privilege, private Charter, or other Cuſtom, to the contrary thereof notwithſtanding.

And be it Enacted, by the Authority aforeſaid, That no Perſon or Perſons ſhall print, publiſh, or vend, or cauſe to be printed, publiſhed, or vended, any Nautical Almanac or Almanacs, or other Table or Tables conſtructed under the Direction of the ſaid Commiſſioners, without being firſt licenſed by the ſaid Commiſſioners, or the major Part of them: And if any Perſon or Perſons not ſo licenſed, or not being authorized by the Perſon or Perſons ſo licenſed by the ſaid Commiſſioners, ſhall print, publiſh, or vend, or cauſe to be printed, publiſhed, or vended, any ſuch Nautical Almanac or Almanacs, or other Table or Tables, every ſuch Perſon or Perſons ſhall, for every Copy of ſuch Nautical Almanac or Table ſo printed, publiſhed, or vended, forfeit and pay the Sum of Twenty Pounds; to be recovered by Action of Debt, Bill, Plaint, or Information, in any of his Majeſty's Courts of Record at *Weſtminſter*; and that One Moiety of ſuch Penalty and Forfeiture ſhall be to his Majeſty, his Heirs and Succeſſors, and the other Moiety to him or them that ſhall proſecute, inform, or ſue for the ſame.

EXTRACT from the late Act of Parliament concerning the Longitude, made in the Tenth Year of the Reign of his preſent Majeſty.

BE it Enacted by the KING's moſt Excellent Majeſty, by and with the Advice and Conſent of the Lords Spiritual and Temporal, and Commons, in this preſent Parliament aſſembled, and by the Authority of the ſame, That the ſaid Commiſſioners conſtituted by the ſaid ſeveral Acts before-mentioned for the Diſcovery of the Longitude at Sea, and for examining, trying, and judging of all Propoſals, Experiments, and Improvements relating to the ſame, or any Five or more of them, ſhall have full Power to hear and receive any Propoſal or Propoſals that have been, or that ſhall hereafter be made to them for diſcovering the ſaid Longitude at Sea; or for improving the ſaid [Profeſſor Mayer's] Lunar Tables; or for making any other Diſcovery or Diſcoveries, Improvement or Improvements, uſeful to Navigation; and in caſe the ſaid Commiſſioners, or any Five or more of them, ſhall be ſo far ſatisfied of the Probability of any ſuch Propoſal, as to think it proper to make Experiment thereof, or of the Utility of ſuch Diſcovery or Improvement, as to think the ſame deſerving of Reward, they ſhall certify the ſame under their Hands and Seals to the Commiſſioners of the Navy for the Time being, together with the Names of the Perſon or Perſons who ſhall be the Author or Authors of ſuch Propoſal or Propoſals, or who ſhall make ſuch Diſcovery or Diſcoveries, Improvement or Improvements; and, upon producing ſuch Certificate, the ſaid Commiſſioners of the Navy are hereby authorized and required to make out a Bill or Bills for any ſuch Sum or Sums of Money, not exceeding in the Whole the Sum of Five thouſand Pounds, as the ſaid Commiſſioners for the Diſcovery of the ſaid Longitude, or any Five or more of them, ſhall think neceſſary for making any Experiments, or for giving any Reward or Rewards, Sum or Sums of Money, to ſuch Perſon or Perſons as ſhall improve the ſaid Lunar Tables, or ſhall make any Diſcovery or Diſcoveries, Improvement or Improvements uſeful to Navigation, in purſuance of this Act, or any of the ſaid Acts herein before-mentioned, payable by the Treaſurer of the Navy; which Sum or Sums of Money the Treaſurer of the Navy for the Time being is hereby authorized and required to pay immediately to the Perſon or Perſons mentioned in the ſaid Certificate or Certificates, out of any Money that ſhall be in his the ſaid Treaſurer's Hands unapplied for the Uſe of the Navy: Provided always, That if any ſuch Reward or Sum of Money ſhall exceed the Sum of One thouſand Pounds; then, and in that Caſe, the ſame ſhall be certified under the Hands and Seals of the major Part of the ſaid Commiſſioners for the Diſcovery of the ſaid Longitude.

By the COMMISSIONERS appointed by Acts of Parliament for the Diſcovery of the Longitude at Sea, and for examining, trying, and judging of all Propoſals, Experiments, and Improvements relating to the ſame.

WHEREAS we have employed proper Perſons to compute Nautical Almanacs and Aſtronomical Ephemerides for the Years 1773 and 1774, which will greatly contribute to make the Lunar Tables conſtructed by the late Profeſſor MAYER of *Gottingen* (which you have already printed with our Authority) more generally uſeful; and whereas we think fit to employ you to print the ſaid Nautical Almanacs and Aſtronomical Ephemerides: We do therefore, in purſuance of the Power veſted in us by Act of Parliament, hereby licenſe, authorize, and impower you to cauſe the ſame to be printed, together with ſuch other uſeful Tables for facilitating the Method of diſcovering the Longitude at Sea, as ſhall have been conſtructed under our Direction, and will be delivered to you by the Reverend Mr. NEVIL MASKELYNE, his Majeſty's Aſtronomer Royal at *Greenwich*; and for ſo doing this ſhall be your ſufficient Warrant. Given under our Hands and Seals the 2d Day of *March* 1771.

SANDWICH (L.S.)
FL. NORTON (L.S.)
T. GRIFFIN (L.S.)
J. FORBES (L.S.)
T. FRANKLAND (L.S.)
J. WEST (L.S.)
N. MASKELYNE (L.S.)
T. HORNSBY (L.S.)
J. SMITH (L.S.)
E. WARING (L.S.)
A. SHEPHERD (L.S.)
P. STEPHENS (L.S.)
H. PALLISSER (L.S.)
J. SMITH (L.S.)

To Mr. WILLIAM
RICHARDSON,
Printer in *Saliſbury-*
court, Fleet-ſtreet.

By Order of the Commiſſioners,

JOHN IBBETSON, Secretary.

By the Commissioners appointed by Acts of Parliament for the Diſcovery of the Longitude at Sea, and for examining, trying, and judging of all Propoſals, Experiments, and Improvements relating to the ſame.

WHEREAS we think fit to employ you to publiſh and vend, and to cauſe to be publiſhed and vended, the Nautical Almanacs and Aſtronomical Ephemerides for the Years 1773 and 1774, together with other uſeful Tables (conſtructed under our Direction) for facilitating the Method of diſcovering the Longitude at Sea, which will be printed by Mr. William Richardson of *Saliſbury-court, Fleet-ſtreet:* We do therefore, in purſuance of the Power veſted in us by Act of Parliament, hereby licenſe, authorize, and impower you to publiſh and vend, and to cauſe to be publiſhed and vended, the ſaid Nautical Almanacs and Aſtronomical Ephemerides, together with the other uſeful Tables above-mentioned. For which this ſhall be your ſufficient Warrant. Given under our Hands and Seals the 2d Day of *March* 1771.

Sandwich (L.S.)
Fl. Norton (L.S.)
T. Griffin (L.S.)
J. Forbes (L.S.)
T. Frankland (L.S.)
J. West (L.S.)
N. Maskelyne (L.S.)
T. Hornsby (L.S.)
J. Smith (L.S.)
E. Waring (L.S.)
A. Shepherd (L.S.)
Ph. Stephens (L.S.)
H. Pallisser (L.S.)
J. Smith (L.S.)

To Mr. John Nourse,
Bookſeller in the *Strand*.

By Order of the Commiſſioners,
John Ibbetson, Secretary.

☞ A Licence was alſo granted to the like Effect to Meſſ. John Mount and Thomas Pag, Stationers on *Tower-hill*.

PREFACE.

THE Commiſſioners of Longitude, in purſuance of the Powers veſted in them by Act of Parliament, preſent the Publick with the NAUTICAL ALMANAC and ASTRONOMICAL EPHEMERIS for the Year 1774, being the Eighth Impreſſion, to be continued annually; a Work which muſt greatly contribute to the Improvement of Aſtronomy, Geography, and Navigation. This EPHEMERIS contains every Thing eſſential to general Uſe that is to be found in any Ephemeris hitherto publiſhed, with many other uſeful and intereſting Particulars never yet offered to the Publick in any Work of this Kind. The Tables of the Moon had been brought by the late Profeſſor MAYER of Gottingen to a ſufficient Exactneſs to determine the Longitude at Sea, within a Degree, as appeared by the Trials of ſeveral Perſons who made Uſe of them. The Difficulty and Length of the neceſſary Calculations ſeemed the only Obſtacles to hinder them from becoming of general Uſe: To remove which this EPHEMERIS was made; the Mariner being hereby relieved from the Neceſſity of calculating the Moon's Place from the Tables, and afterwards computing the Diſtance to Seconds by Logarithms, which are the principal and only very delicate Part of the Calculus; ſo that the finding the Longitude by the Help of the EPHEMERIS is now in a Manner reduced to the Computation of the Time, an Operation equal to that of an Azimuth, and the Correction of the Diſtance on account of Refraction and Parallax, which is alſo rendered very eaſy by either of the Two Methods invented by Mr. LYONS and Mr. DUNTHORNE, and publiſhed among the Tables

requiſite

requiſite to be uſed with the EPHEMERIS; or by either of the Two Methods annexed to the EPHEMERIS of 1772, being both Improvements of the Method which I formerly publiſhed in the BRITISH MARINER'S GUIDE and PHILOSOPHICAL TRANSACTIONS, the Firſt by myſelf, and the Second by Mr. GEORGE WITCHELL.

By Deſire of the Commiſſioners of Longitude, I drew up the Explanation and Uſe of the Articles contained in the EPHEMERIS, and the Inſtructions, with Examples, for finding the Longitude at Sea by the Help of the ſame. I alſo collected and calculated the Sixteen Firſt Pages of Tables requiſite to be uſed with the EPHEMERIS, and computed the Table of proportional Logarithms, which ſeemed to me abſolutely neceſſary to clear this Method of any remaining Difficulty; and added Explanations of all the Tables, and a Correction, p. 49 and 50, which may be applied by the Curious to the Effect of Refraction on the Moon's Diſtance from a Star, found by Mr. LYONS, or any other Method, on account of the Barometer and Thermometer.

All the Calculations of the EPHEMERIS relating to the Sun and Moon were made from Mr. MAYER'S laſt manuſcript Tables, received by the Board of Longitude after his Deceaſe, which have been printed under my Inſpection, and publiſhed in 1770. The Calculations of the Planets were made from Dr. HALLEY'S Tables; and the Eclipſes of Jupiter's Firſt and Second Satellites from the Tables of Mr. WARGENTIN, publiſhed by M. DE LA LANDE in 1759; and thoſe of the Third and Fourth Satellites from Tables of the ſame farther improved by Mr. WARGENTIN, and annexed, the firſt, to the NAUTICAL ALMANAC of 1771, and the other to the CONNOISSANCE DES MOUVEMENTS CELESTES of 1766.

All the Articles of the EPHEMERIS were computed by Two ſeparate Perſons, and examined by a Third, except the Moon's Longitude, Latitude, Right Aſcenſion, Declination, Semidiameter, and Parallax, which, for Noon, were computed by One Perſon, and for Midnight by another, and the Truth of theſe Calculations aſcertained by means of Differences, which, for the Moon's Longitude, were carried as far as the Fourth Order.

To this EPHEMERIS are annexed 1220 Longitudes and Latitudes of the Moon, deduced from the late Dr. BRADLEY'S Obſervations, made with the new Meridian Inſtruments at the *Royal Obſervatory* conſtructed by Mr. BIRD, between SEPT. 13th 1750 and Nov. 2d 1760, and compared with a Set of manuſcript Tables improved by Dr. BRADLEY from Profeſſor MAYER'S Firſt manuſcript Tables. The greater Part of theſe Calculations was made during Dr. BRADLEY'S Lifetime by himſelf and his Aſſiſtant Mr. CHARLES MASON; and what was left unfiniſhed has been completed by Mr. MASON ſince at the Inſtance and at the Expence of the Board of Longitude. A Series of Obſervations this for Number and Exactneſs far excelling any thing of the ſame Kind which the World ever ſaw before, and which preſent or even future Aſtronomers will not eaſily ſurpaſs in Accuracy, affording a ſure Touch-ſtone for trying the beſt modern Lunar Tables and Theories, and the Means of improving them! Accordingly the Board of Longitude have thought proper to employ Mr. MASON farther in making the neceſſary Calculations for improving MAYER's printed Tables, under my Direction, by the Help of this Series of Obſervations, which comprehends ſomewhat more than a Period of the Moon's Apogee; and I have the Pleaſure to find from that Part of the Work which is already done, that the Corrections (contrary to Expectation) turn out ſo conſiderable as to give Room to hope that, when all the Corrections are made, the greateſt Errors of the Tables may be reduced within a much narrower Campaſs than they are at preſent.

To the Ten Years Series of Lunar Obſervations I have ſubjoined the Elements of the Lunar Tables with which the foregoing Obſervations were compared, and likewiſe the Elements of Profeſſor MAYER's Firſt and Second manuſcript Tables, and of a printed Set of Tables compoſed by the late Mr. GAEL MORRIS; all expreſſed after the Manner of the Formulæ exhibited in p. 52 and 57 of MAYER's THEORIA LUNÆ.

The HADLEY's QUADRANT, which has long been acknowledged the moſt convenient and exact Inſtrument for finding the Latitude by Altitudes of the Sun, having alſo for ſome Years paſt been found the beſt adapted Inſtrument for finding the Longitude at Sea from Obſervations of Diſtances of the Moon from the Sun and Stars, every Improvement in the Conſtruction and Adjuſtment of this

this valuable Inſtrument becomes a Matter of Importance. I here offer my Attempts for this Purpoſe in Remarks on the Hadley's Quadrant; and if they ſhall be found to extend its Uſe, or augment its Exactneſs, I ſhall have obtained my End.

Laſtly is added, a uſeful aſtronomical Problem to find the Error of a Tranſit Teleſcope, by Mr. Lyons; and Two Examples, by the ſame, of the Calculation of the Longitude from an Obſervation of the Moon, when the general Tables of Refraction and Parallax (which are now completed and will be publiſhed ſhortly) are made Uſe of.

The Circumſtances of the Occultation of Venus by the Moon, Dec. 20th 1772 (this Year) was not ſet down in the Firſt Page of Dec. in the Ephemeris for this Year, becauſe it happens in the Day-time, and it was doubted whether it would be viſible. But as it may be expected to be ſeen with a good Teleſcope, if the Air ſhould prove clear, I ſhall ſet down the Particulars of the Occultation in this Place.

Apparent Time at Greenwich.

	H. M. S.	M. S.
Firſt Contact .	20. 49. 13	♀ 15. 30 North of ☽'s Center.
Total Immerſion	20. 51. 3	
Begin. of Emerſ.	21. 15. 29	♀ 15. 34 North of ☽'s Center.
Laſt Contact .	21. 17. 23	

Let me remark alſo, that the Firſt Impreſſion of the Moon on the Sun, in the ſmall ſolar Eclipſe of Oct. 25th of this Year, will happen 44° to the Weſt of the Sun's uppermoſt Point; but as the greateſt Impreſſion of the Moon on the Sun at the Middle of the Eclipſe is only One Fourth of a Minute by the Tables, if there ſhould happen to be a ſmall Error of the Tables in Latitude, the Circumſtances of the Eclipſe may differ widely from thoſe ſet down, or it may prove no Eclipſe at all.

I cannot conclude this Preface without taking Notice of ſome Remarks made on the Calculations of the Sun in the NAUTICAL ALMANACS of 1769 and 1770, by M. BERNOUILLI, Aſtronomer to his PRUSSIAN Majeſty, in his RECUEIL POUR LES ASTRONOMES, which might lead thoſe who ſhould not take the Pains to examine the Matter to think that the Calculations of the NAUTICAL ALMANAC are not made with that Care which the Public have a Right to expect. M. BERNOUILLI's words, p. 20 and 21, are as follow: "Ayant calculé un
" grand nombre de lieux du Soleil à midi vrai,
" pour l'année paſſée & pour celle-ci (1770) &
" pour les Méridiens de Vienne, de Paris, & de
" Greenwich, il m'a paru que ces calculs ſe faiſoient
" avec le plus de ſoin dans le prémier endroit;
" les erreurs étoient ordinairement nulles, & je n'en
" ai trouvé que deux qui paſſaſſent 2″. Dans l'Al-
" manac Nautique, les longitudes du Soleil m'ont
" paru fort exactes pour l'uſage auquel cet ouvrage
" eſt deſtiné; les erreurs ne ſe ſont jamais trouvé
" nulles, mais auſſi la plus grand n'a été que de
" 13″. J'ai remarqué deux erreurs plus fortes
" dans la connoiſſance des tems, mais en revanche
" l'erreur aſſés ſouvent étoit 0." In Engliſh, thus:
" Having calculated a great many Longitudes of

"the Sun at apparent Noon in the laſt Year and
"in the preſent Year 1770, and for the Meridians
"of VIENNA, PARIS, and GREENWICH, it appeared
"to me that theſe calculations were made with the
"moſt care for the Firſt Place [namely, in the
"Ephemerides of VIENNA] the Errors were com-
"monly nothing, and I found only Two which
"exceeded Two Seconds. In the NAUTICAL AL-
"MANAC the Longitudes of the Sun appeared to
"me very exact for the Uſe for which this Work
"is intended; the Errors were never nothing,
"but then the greateſt Error was only 13″. I have
"remarked Two Errors greater than this in the
"CONNOISSANCE DES TEMPS; but, in Return,
"the Error was often nothing."

Being ſatisfied from my own Calculations, and thoſe of other able Computers, that the Calculations of the NAUTICAL ALMANAC here alluded to are made with all poſſible Care and Exactneſs, that the Error is commonly nothing, and never exceeds One or Two Seconds at moſt, I might call upon Mr. BERNOUILLI to point out the Days where he ſuppoſes the Calculations to be faulty, and to produce his own Calculations, but that his own Words in the Page preceding thoſe already cited are ſufficient to ſhew the Miſtake to have been his own in ſuppoſing the Calculations of the Sun's Longitude in the NAUTICAL ALMANAC, like thoſe in the Ephemerides of Vienna and in the Connoiſſance des Temps, to be made from DE LA CAILLE's Solar Tables, whereas they were really made from MAYER's Solar Tables.

His

His words in p. 19 are theſe: " On eſt étonné " en ouvrant les Ephémérides les plus célebres, de " trouver entre les Tables de l'Equation du Temps, " des différences bien plus conſidérables que celles " qui réſultent de la différence des Méridiens pour " leſquelles ces Ephémérides ſont calculées, d'autant " que depuis la publication des célebres Tables du " Soleil de feu M. de la Caille, tous les Calculs du " Soleil ont, je crois, été faits ſur ces Tables, ſi ce " n'eſt dans les Ephémérides de Bologne, où l'on a " ſuivi les Tables de Halley, & dans leſquelles, " au reſte on ne trouve pas l'Equation du Tems. " J'eus du moins cette ſurpriſe en comparant en" ſemble rélativement à cette Equation, les Ephé" mérides de Vienne, celles de M. l'Abbé de la " Caille, la Connoiſſance des Temps, & l'Amanac " Nautique de M. Maſkelyne."

In Engliſh thus: " It is a Matter of Surprize to " find that the Equation of Time in the moſt cele" brated Ephemerides differs more than what ſhould " ariſe from the Difference of Meridians for which " they are calculated, conſidering that ſince the pub" lication of the celebrated Solar Tables of the late " M. DE LA CAILLE, all the Calculations of the " Sun have, I believe, been made from theſe Tables, " except in the Ephemerides of Bologna, where " HALLEY's Tables have been followed, in which " however the Equation of Time is not ſet down. " At leaſt I was myſelf ſtruck with Surprize upon " comparing together the Ephemerides of Vienna, " thoſe of M. l'Abbé DE LA CAILLE, the Con" noiſſance des Temps, and Nautical Almanac of " Mr. MASKELYNE."

From hence it appears, that M. Bernouilli took it for granted that the Longitudes of the Sun in the Nautical Almanac were calculated from De la Caille's Solar Tables. But he might have been eaſily ſatisfied to the contrary, if he would but have taken the Trouble to conſult the Preface of any one of the Nautical Almanacs from 1767 to the preſent, in which he would have found theſe Words, "All the Calculations of the Ephemeris "relating to the Sun and Moon were made from "Mr. Mayer's laſt manuſcript Tables, received "by the Board of Longitude after his Deceaſe, "which have been printed under my Inſpection." Therefore after all the wonder is, not that Calculations of the Nautical Almanac ſhould ſometimes differ 13″ from De la Caille's Solar Tables, but rather that they ſhould never differ more from theſe Tables which they were not computed from. It will eaſily be allowed that theſe Tables may ſometimes differ from Mayer's by 13″, and in Effect I find that the Difference of the Tables may ſometimes, though very rarely, amount to 17″. The greater errors which M. Bernouilli finds in the Calculations of the Connoiſſance des Temps, with reſpect to the Tables from which they were really computed, it is neither my Buſineſs to aggravate or excuſe. On the whole, I would not be underſtood to inſinuate that I thought M. Bernouilli had any Deſign of miſrepreſenting the Truth on this Occaſion: I believe the contrary, and entertain the ſame Eſteem for the Talents and Spirit of this young Aſtronomer as when I had the Pleaſure of his Acquaintance during his Viſit to England; and from a Letter of his which I have ſeen addreſſed to one of his Correſpondents here, am aſſured he will have the Candor to acknowledge and rectify his Miſtake in the next Volume of his RECUEIL POUR LES ASTRONOMES.

NEVIL MASKELYNE,
ASTRONOMER ROYAL.

GREENWICH,
JULY 2d,
1772.

Erratum of Elements of Lunar Tables.

Page 44. Maximum of 8th Equation of Latitude in Mayer's printed Tables; for + 0°. 0'. 3,7'', read — 0°. 0'. 3,7''.

EXPLA-

JANUARY 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	Sa.	*Circumciſion.*
2	*Su.*	*2d Sunday after Chriſtmas.*
3	M.	
4	Tu.	
5	W.	
6	Th.	*Epiphany.*
7	F.	
8	Sa.	Lucian.
9	*Su.*	*1ſt Sunday after Epiphany.*
10	M.	
11	Tu.	
12	W.	
13	Th.	Hil. Camb. Ter. begins.
14	F.	Oxford Term begins.
15	Sa.	
16	*Su.*	*2d Sunday after Epiphany.*
17	M.	
18	Tu.	Q. Charlotte's birth-day
19	W.	[kept. Priſca.
20	Th.	Fabian. In 8 days of S.
21	F.	Agnes. [Hil. 1 ret.
22	Sa.	Vincent.
23	*Su.*	*3d Sunday after Epiphany.*
24	M.	Hilary Term begins.
25	Tu.	*Converſion of St. Paul.*
26	W.	
27	Th.	From S. Hil. in 15 days
28	F.	[2 ret.
29	Sa.	
30	*Su.*	*Septuageſ. Sund. K. Cha. I.*
31	M.	[*martyr'd.*

Phaſes of the Moon.	D. H. M.
Laſt Quarter——	5. 5. 40
New Moon ——	11. 20. 45
Firſt Quarter——	19. 3. 11
Full Moon ——	27. 6. 48

D.	Other Phenomena.
1.	☾ ο ♌ 1^{h}. 33′.
3.	☾ τ ♌ 4^{h}. 39′.
	☾ β ♍ 14^{h}. 55′.
4.	☾ η ♍ 4^{h}. 55′.
5.	☾ θ ♍ 4^{h}. 46′.
	♄ Stationary.
6.	☾ κ ♍ 8^{h}. 59′.
7.	☾ γ ♎ 19^{h}. 31′.
	☾ η ♎ 23^{h}. 13.
8.	☾ θ ♎ 3^{h}. 19′.
10.	♀ λ ♒ diff. Lat. 2′.
14.	☾ θ ♒ 11^{h}. 47′.
15.	☾ ♀ 10^{h}. 27′.
17.	☾ ♃ 1^{h}. 24′.
19.	☉ enters ♒ at 9^{h}. 19′.
21.	☾ γ ♉ 21^{h}. 27′.
	☾ 1 ad ☌ ♉ 23^{h}. 37′.
22.	☾ 2 ad ☌ ♉ 0^{h}. 8′.
	☾ α ♉ Im. 4^{h}. 17′. * $2\frac{1}{2}$′ N. of ☽'s cent. Em. 5^{h}. 31′. * $0\frac{1}{2}$′N.
28.	☾ ξ ♌ 2^{h}. 42′.
	☾ ο ♌ 7^{h}. 36′.
30.	☾ τ ♌ 10^{h}. 5′.
	☾ β ♍ 20^{h}. 17′.
31.	☾ η ♍ 10^{h}. 13′.

JANUARY 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Asc. in Time.	Sun's Declin. South.	Equat. of Time Add.	Diff.
		S. D. M. S.	H. M. S.	D. M. S	M. S.	S.
1	Sa.	9. 11. 15. 35	18. 48. 58,9	22. 59. 17	4.13,3	28,1
2	*Su.*	9. 12. 16. 45	18. 53. 23,6	22. 53. 54	4.41,4	27,7
3	M.	9. 13. 17. 55	18. 57. 47,9	22. 48. 3	5. 9,1	27,2
4	Tu.	9. 14. 19. 6	19. 2. 11,8	22. 41. 44	5.36,3	26,9
5	W.	9. 15. 20. 16	19. 6. 35,3	22. 35. 0	6. 3,2	26,5
6	Th.	9. 16. 21. 27	19. 10. 58,4	22. 27. 47	6.29,7	25,9
7	F.	9. 17. 22. 38	19. 15. 21,0	22. 20. 8	6.55,6	25,5
8	Sa.	9. 18. 23. 48	19. 19. 43,1	22. 12. 3	7.21,1	25,0
9	*Su.*	9. 19. 24. 59	19. 24. 4,7	22. 3. 32	7.46,1	24,4
10	M.	9. 20. 26. 9	19. 28. 25,7	21. 54. 35	8.10,5	23,9
11	Tu.	9. 21. 27. 20	19. 32. 46,2	21. 45. 12	8.34,4	23,2
12	W.	9. 22. 28. 30	19. 37. 6,1	21. 35. 24	8.57,6	22,6
13	Th.	9. 23. 29. 39	19. 41. 25,3	21. 25. 11	9.20,2	21,9
14	F.	9. 24. 30. 47	19. 45. 43,8	21. 14. 33	9.42,1	21,3
15	Sa.	9. 25. 31. 55	19. 50. 1,7	21. 3. 30	10. 3,4	20,6
16	*Su.*	9. 26. 33. 2	19. 54. 18,9	20. 52. 4	10.24,0	19,8
17	M.	9. 27. 34. 8	19. 58. 35,3	20. 40. 13	10.43,8	19,1
18	Tu.	9. 28. 35. 13	20. 2. 51,0	20. 28. 0	11. 2,9	18,3
19	W.	9. 29. 36. 17	20. 7. 5,9	20. 15. 23	11.21,2	17,5
20	Th.	10. 0. 37. 19	20. 11. 20,0	20. 2. 24	11.38,7	16,8
21	F.	10. 1. 38. 21	20. 15. 33,4	19. 49. 2	11.55,5	16,0
22	Sa.	10. 2. 39. 22	20. 19. 46,0	19. 35. 18	12.11,5	15,1
23	*Su.*	10. 3. 40. 21	20. 23. 57,7	19. 21. 13	12.26,6	14,3
24	M.	10. 4. 41. 19	20. 28. 8,7	19. 6. 46	12.40,9	13,5
25	Tu.	10. 5. 42. 16	20. 32. 18,8	18. 51. 58	12.54,4	12,7
26	W.	10. 6. 43. 11	20. 36. 28,0	18. 36. 50	13. 7,1	11,9
27	Th.	10. 7. 44. 6	20. 40. 36,5	18. 21. 22	13.19,0	11,1
28	F.	10. 8. 44. 59	20. 44. 44,2	18. 5. 34	13.30,1	10,2
29	Sa.	10. 9. 45. 52	20. 48. 51,0	17. 49. 26	13.40,3	9,5
30	*Su.*	10. 10. 46. 44	20. 52. 57,0	17. 33. 0	13 49,8	8,6
31	M.	10. 11. 47. 34	20. 57. 2,2	17. 16. 14	13.58,4	7,8

JANUARY 1774.

Days of the Month.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	16. 19,2	1. 10,9	2. 32,9	9.992633	5. 26. 4
7	16. 19,1	1. 10,6	2. 32,8	9.992725	5. 25. 45
13	16. 18,8	1. 10,1	2. 32,8	9.992885	5. 25. 26
19	16. 18,2	1. 9,5	2. 32,6	9.993102	5. 25. 6
25	16. 17,5	1. 8,9	2. 32,3	9.993391	5. 24. 47

Eclipſes of the SATELLITES of JUPITER.

I. Satellite. Emerſions.

Days	H. M. S.
2	9*33. 39
4	4. 1. 49
5	22. 30. 1
7	16. 58. 13
9	11. 26. 28
11	5*54. 46
13	0. 23. 3
14	18. 51. 26
16	13. 19. 50
18	7*48. 15
20	2. 16. 41
21	20. 45. 10
23	15. 13. 40
25	9. 42. 15
27	4. 10. 51
28	22. 39. 32
30	17. 8. 12

II. Satellite. Emerſions.

Days	H. M. S.
3	1. 7. 47
6	14. 24. 19
10	3. 40. 57
13	16. 57. 37
17	6*14. 29
20	19. 31. 28
24	8*48. 33
27	22. 5. 51
31	11. 23. 10

III. Satellite.

Days	H. M. S.	
6	0. 15. 0	I
6	2. 28. 38	E
13	4. 15. 15	I
13	6*27. 27	E
20	8*16. 9	I
20	10. 26. 57	E
27	12. 17. 37	I
27	14. 27. 1	E

IV. Satellite. Conj.

6	14. 14	Inf.
14	23. 20	Sup.
23	8*27	Inf.
31	17. 34	Sup.

JANUARY 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſage over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
	MERCURY. Gr. Elong. 11^{d}.					
1	5. 3. 35	6. 39 N	8. 21. 7	2. 54 N	20. 16 S	22. 32
7	5. 29. 22	5. 5	8. 24. 5	2. 7	21. 13	22. 19
13	6. 20. 58	2. 57	8. 29. 52	1. 11	22. 17	22. 19
19	7. 9. 50	0. 44 N	9. 7. 8	0. 17 N	22. 59	22. 25
25	7. 27. 6	1. 22 S	9. 15. 16	0. 31 S	23. 6	22. 35
	VENUS. Gr. Elong. 10^{d}.					
1	1. 21. 48	1. 19 S	10. 28. 8	1. 16 S	13. 19 S	3. 14
7	2. 1. 27	0. 46	11. 4. 29	0. 47	10. 37	3. 11
13	2. 11. 7	0. 11 S	11. 10. 34	0. 12 S	7. 47	3. 7
19	2. 20. 48	0. 22 N	11. 16. 26	0. 26 N	4. 58	3. 2
25	3. 0. 30	0. 56	11. 21. 56	1. 10	2. 8	2. 56
	MARS. ☌ 20^{d}. $15\frac{3}{4}^{h}$.					
1	9. 19. 41	1. 38 S	9. 16. 14	0. 58 S	23. 26 S	0. 22
7	9. 23. 21	1. 41	9. 20. 53	0. 59	22. 49	0. 16
13	9. 27. 1	1. 44	9. 25. 34	1. 1	22. 3	0. 10
19	10. 0. 44	1. 46	10. 0. 16	1. 2	21. 8	0. 4
25	10. 4. 27	1. 48	10. 4. 58	1. 3	20. 4	23. 58
	JUPITER.					
1	0. 13. 7	1. 19 S	0. 1. 49	1. 18 S	0. 28 S	5. 19
7	0. 13. 40	1. 19	0. 2. 35	1. 16	0. 8 S	4. 55
13	0. 14. 13	1. 19	0. 3. 27	1. 15	0. 14 N	4. 33
19	0. 14. 46	1. 19	0. 4. 24	1. 14	0. 38	4. 10
25	0. 15. 19	1. 19	0. 5. 25	1. 12	1. 3	3. 49
	SATURN.					
1	5. 20. 22	2. 9 N	5. 26. 10	2. 13 N	3. 33 N	16. 57
7	5. 20. 35	2. 9	5. 26. 10	2. 15	3. 35	16. 31
13	5. 20. 48	2. 9	5. 26. 7	2. 16	3. 38	16. 5
19	5. 21. 0	2. 9	5. 25. 59	2. 18	3. 42	15. 39
25	5. 21. 12	2. 10	5. 25. 48	2. 20	3. 48	15. 13

JANUARY 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M.S.
1	Sa.	4. 20. 17. 32	4. 26. 35. 51	2. 52. 13 S	2.23.52 S
2	*Su.*	5. 2. 57. 0	5. 9. 21. 22	1. 53. 29	1.21.22
3	M.	5. 15. 49. 9	5. 22. 20. 46	0. 47. 53 S	0.13.26 S
4	Tu.	5. 28. 56. 32	6. 5. 36. 44	0. 21. 37 N	0.56.47 N
5	W.	6. 12. 21. 42	6. 19. 11. 49	1. 31. 35	2. 5.31
6	Th.	6. 26. 7. 8	7. 3. 7. 52	2. 38. 3	3. 8.35
7	F.	7. 10. 14. 3	7. 17. 25. 24	3. 36. 38	4. 1.33
8	Sa.	7. 24. 41. 46	8. 2. 2. 40	4. 22. 55	4.40. 6
9	*Su.*	8. 9. 27. 27	8. 16. 55. 14	4. 52. 46	5. 0.31
10	M.	8. 24. 25. 3	9. 1. 55. 40	5. 3. 11	5. 0.35
11	Tu.	9. 9. 25. 59	9. 16. 54. 43	4. 52. 49	4.40. 3
12	W.	9. 24. 20. 36	10. 1. 42. 36	4. 22. 33	4. 0.48
13	Th.	10. 8. 59. 41	10. 16. 10. 54	3. 35. 20	3. 6.45
14	F.	10. 23. 15. 47	11. 0. 13. 54	2. 35. 35	2. 2.31
15	Sa.	11. 7. 5. 6	11. 13. 49. 12	1. 28. 9	0.53.11 N
16	*Su.*	11. 20. 26. 26	11. 26. 57. 4	0. 18. 1 N	0.16.58 S
17	M.	0. 3. 21. 35	0. 9. 40. 20	0. 51. 7 S	1.24.10
18	Tu.	0. 15. 54. 1	0. 22. 3. 5	1. 55. 47	2.25.37
19	W.	0. 28. 8. 19	1. 4. 10. 20	2. 53. 33	3.19.13
20	Th.	1. 10. 9. 45	1. 16. 7. 13	3. 42. 32	4. 3.18
21	F.	1. 22. 3. 26	1. 27. 58. 54	4. 21. 23	4.36.34
22	Sa.	2. 3. 54. 13	2. 9. 49. 53	4. 48. 46	4.57.52
23	*Su.*	2. 15. 46. 29	2. 21. 44. 15	5. 3. 48	5. 6.26
24	M.	2. 27. 43. 40	3. 3. 45. 8	5. 5. 45	5. 1.39
25	Tu.	3. 9. 48. 40	3. 15. 54. 38	4. 54. 8	4.43.15
26	W.	3. 22. 3. 4	3. 28. 14. 15	4. 28. 57	4.11.27
27	Th.	4. 4. 28. 7	4. 10. 44. 47	3. 50. 44	3.27. 6
28	F.	4. 17. 4. 16	4. 23. 26. 32	3. 0. 42	2.31.50
29	Sa.	4. 29. 51. 34	5. 6. 19. 30	2. 0. 45	1.27.51
30	*Su.*	5. 12. 50. 16	5. 19. 23. 55	0. 53. 32 S	0.18.13 S
31	M.	5. 26. 0. 30	6. 2. 40. 3	0. 17. 40 N	0.53.35 N

JANUARY 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſcen. at Midn.	☽'s Declinat. at Noon.	☽'s Declinat. at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	Sa.	20	15. 7	141. 46	148. 0	11. 59 N	10. 25 N
2	*Su.*	21	15. 53	154. 13	160. 25	8. 40	6. 49
3	M.	22	16. 40	166. 39	172. 53	4. 52	2. 50 N
4	Tu.	23	17. 29	179. 10	185. 32	0. 45 N	1. 22 S
5	W.	24	18. 19	191. 58	198. 31	3. 29 S	5. 35
6	Th.	25	19. 11	205. 11	212. 0	7. 39	9. 37
7	F.	26	20. 5	218. 58	226. 7	11. 29	13. 11
8	Sa.	27	21. 3	233. 26	240. 55	14. 43	16. 1
9	*Su.*	28	22. 4	248. 33	256. 18	17. 4	17. 50
10	M.	29	23. 5	264. 9	272. 1	18. 18	18. 27
11	Tu.	1	☌	279. 53	287. 43	18. 16	17. 46
12	W.	2	0. 5	295. 27	303. 2	16. 58	15. 53
13	Th.	3	1. 3	310. 27	317. 41	14. 34	13. 2
14	F.	4	1. 57	324. 44	331. 35	11. 20	9. 29
15	Sa.	5	2. 48	338. 15	344. 45	7. 33	5. 33
16	*Su.*	6	3. 37	351. 6	357. 19	3. 31 S	1. 28 S
17	M.	7	4. 23	3. 25	9. 26	0. 33 N	2. 33 N
18	Tu.	8	5. 8	15. 24	21. 18	4. 29	6. 20
19	W.	9	5. 52	27. 11	33. 3	8. 7	9. 48
20	Th.	10	6. 36	38. 56	44. 51	11. 21	12. 47
21	F.	11	7. 21	50. 47	56. 47	14. 5	15. 14
22	Sa.	12	8. 7	62. 50	68. 57	16. 13	17. 2
23	*Su.*	13	8. 54	75. 7	81. 20	17. 40	18. 7
24	M.	14	9. 42	87. 37	93. 56	18. 21	18. 23
25	Tu.	15	10. 30	100. 18	106. 41	18. 12	17. 50
26	W.	16	11. 18	113. 5	119. 28	17. 14	16. 26
27	Th.	17	12. 6	125. 51	132. 14	15. 26	14. 14
28	F.	18	12. 54	138. 35	144. 55	12. 52	11. 20
29	Sa.	19	13. 42	151. 15	157. 33	9. 39	7. 50
30	*Su.*	20	14. 30	163. 50	170. 8	5. 55	3. 55 N
31	M.	21	15. 18	176. 27	182. 49	1. 51	0. 14 S

JANUARY 1774.

Days of the Month.	Days of the Week.	Semid^r. ☽ at Noon. M. S.	Semid^r. ☽ at Midnight. M. S.	Hor. Par. ☽ at Noon. M. S.	Hor. Par. ☽ at Midnight. M. S.	Proport. Logar. at Noon.	Proport. Logar. at Mid.
1	Sa.	15. 14	15. 18	55. 54	56. 9	5079	5059
2	*Su.*	15. 23	15. 27	56. 26	56. 43	5037	5015
3	M.	15. 32	15. 37	57. 1	57. 20	4992	4968
4	Tu.	15. 43	15. 48	57. 40	58. 1	4943	4917
5	W.	15. 54	16. 0	58. 21	58. 42	4892	4866
6	Th.	16. 5	16. 11	59. 3	59. 23	4841	4816
7	F.	16. 16	16. 21	59. 42	60. 0	4793	4771
8	Sa.	16. 25	16. 29	60. 16	60. 29	4752	4736
9	*Su.*	16. 32	16. 34	60. 40	60. 47	4723	4715
10	M.	16. 35	16. 35	60. 51	60. 50	4710	4711
11	Tu.	16. 34	16. 31	60. 46	60. 38	4716	4725
12	W.	16. 28	16. 24	60. 25	60. 9	4741	4760
13	Th.	16. 18	16. 12	59. 50	59. 27	4783	4811
14	F.	16. 5	15. 59	59. 3	58. 37	4841	4872
15	Sa.	15. 51	15. 44	58. 10	57. 43	4906	4940
16	*Su.*	15. 36	15. 29	57. 16	56. 50	4973	5006
17	M.	15. 22	15. 16	56. 25	56. 2	5038	5068
18	Tu.	15. 10	15. 5	55. 41	55. 22	5095	5120
19	W.	15. 1	14. 57	55. 5	54. 51	5142	5161
20	Th.	14. 54	14. 51	54. 39	54. 30	5177	5189
21	F.	14. 50	14. 48	54. 23	54. 19	5198	5203
22	Sa.	14. 48	14. 48	54. 17	54. 17	5206	5206
23	*Su.*	14. 48	14. 49	54. 20	54. 24	5202	5197
24	M.	14. 51	14. 53	54. 31	54. 38	5187	5178
25	Tu.	14. 56	14. 59	54. 48	54. 58	5165	5152
26	W.	15. 2	15. 6	55. 10	55. 23	5136	5119
27	Th.	15. 9	15. 13	55. 36	55. 50	5102	5084
28	F.	15. 17	15. 21	56. 5	56. 20	5064	5045
29	Sa.	15. 25	15. 29	56. 35	56. 50	5026	5006
30	*Su.*	15. 33	15. 37	57. 5	57. 19	4987	4970
31	M.	15. 41	15. 45	57. 34	57. 48	4951	4933

JANUARY 1774.

Diſtances of ☽'s Center from ⊙, and from Stars eaſt of her.

Days.	Stars Names.	Noon. D. M. S.	3 Hours. D. M. S.	6 Hours. D. M. S.	9 Hours. D. M. S.
1	Spica ♍	60. 20. 26	58. 46. 18	57. 12. 0	55. 37. 32
2		47. 42. 33	46. 6. 59	44. 31. 13	42. 55. 16
3		34. 52. 47	33. 15. 45	31. 38. 33	30. 1. 10
4	Antares.	67. 46. 1	66. 7. 35	64. 28. 55	62. 50. 1
5		54. 32. 5	52. 51. 50	51. 11. 23	49. 30. 43
3	The Sun.	117. 28. 36	115. 58. 47	114. 28. 42	112. 58. 21
4		105. 22. 32	103. 50. 33	102. 18. 16	100. 45. 43
5		92. 58. 30	91. 24. 8	89. 49. 28	88. 14. 29
6		80. 14. 55	78. 38. 4	77. 0. 55	75. 23. 27
7		67. 11. 27	65. 32. 10	63. 52. 36	62. 12. 45
8		53. 49. 25	52. 7. 59	50. 26. 20	48. 44. 28
9		40. 12. 21			
13	α Arietis.	84. 57. 50	83. 12. 20	81. 27. 14	79. 42. 30
14		71. 4. 50	69. 22. 37	67. 40. 53	65. 59. 38
15		57. 40. 52	56. 2. 44	54. 25. 10	52. 48. 11
16		44. 52. 34	43. 19. 26	41. 47. 0	40. 15. 21
17		32. 49. 40			
17	Aldebaran.	63. 19. 12	61. 45. 40	60. 8. 28	58. 33. 37
18		50. 44. 17	49. 11. 22	47. 38. 44	46. 6. 23
19		38. 28. 27	36. 57. 34	35. 26. 53	33. 56. 24
20		26. 26. 42	24. 57. 14	23. 27. 53	21. 58. 40
21	Pollux.	58. 59. 9	57. 32. 46	56. 6. 31	54. 40. 24
22		47. 31. 38	46. 6. 16	44. 41. 3	43. 15. 59
23		36. 13. 19			
23	Regulus.	71. 2. 29	69. 33. 38	68. 4. 43	66. 35. 42
24		59. 9. 8	57. 39. 27	56. 9. 39	54. 39. 43
25		47. 8. 7	45. 37. 21	44. 6. 26	42. 35. 22
26		34. 57. 44	33. 25. 43	31. 53. 32	30. 21. 12
27		22. 37. 27			
27	Spica ♍	76. 7. 24	74. 33. 50	73. 0. 4	71. 26. 7
28		63. 33. 31	61. 58. 26	60. 23. 11	58. 47. 44
29		50. 47. 55	49. 11. 25	47. 34. 45	45. 57. 55
30		37. 51. 29	36. 13. 47	34. 35. 57	32. 58. 1
31		24. 47. 20			
31	Antares.	70. 41. 13	69. 2. 48	67. 24. 13	65. 45. 29
F. 1		57. 29. 45			

JANUARY 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Spica ♍	54. 2. 54	52. 28. 5	50. 53. 6	49. 17. 55
2		41. 19. 8	39. 42. 49	38. 6. 19	36. 29. 38
3		28. 23. 37			
3	Antares.	74. 17. 25	72. 39. 55	71. 2. 11	69. 24. 13
4		61. 10. 53	59. 31. 31	57. 51. 56	56. 12. 7
5		47. 49. 50			
2	The Sun.			120. 27. 28	118. 58. 10
3		111. 27. 44	109. 56. 51	108. 25. 41	106. 54. 15
4		99. 12. 52	97. 39. 44	96. 6. 17	94. 32. 33
5		86. 39. 11	85. 3. 35	83. 27. 40	81. 51. 27
6		73. 45. 40	72. 7. 34	70. 29. 10	68. 50. 28
7		60. 32. 37	58. 52. 12	57. 11. 32	55. 30. 36
8		47. 2. 23	45. 20. 7	43. 37. 41	41. 55. 6
13	α Arietis.	77. 58. 8	76. 14. 10	74. 30. 38	72. 47. 31
14		64. 18. 51	62. 38. 34	60. 58. 48	59. 19. 34
15		51. 11. 49	49. 36. 3	48. 0. 53	46. 26. 23
16		38. 44. 29	37. 14. 27	35. 45. 17	34. 17. 1
17	Aldebaran.	56. 59. 6	55. 24. 55	53. 51. 4	52. 17. 31
18		44. 34. 19	43. 2. 29	41. 30. 54	39. 59. 33
19		32. 26. 7	30. 56. 1	29. 26. 5	27. 56. 19
20		20. 29. 34			
20	Pollux.	64. 46. 3	63. 19. 7	61. 52. 19	60. 25. 40
21		53. 14. 24	51. 48. 31	50. 22. 45	48. 57. 8
22		41. 51. 5	40. 26. 21	39. 1. 49	37. 37. 28
23	Regulus.	65. 6. 36	63. 37. 24	62. 8. 5	60. 38. 40
24		53. 9. 39	51. 39. 29	50. 9. 10	48. 38. 43
25		41. 4. 8	39. 32. 46	38. 1. 15	36. 29. 34
26		28. 48. 43	27. 16. 6	25. 43. 21	24. 10. 28
27	Spica ♍	69. 51. 58	68. 17. 38	66. 43. 7	65. 8. 24
28		57. 12. 7	55. 36. 20	54. 0. 22	52. 24. 14
29		44. 20. 55	42. 43. 46	41. 6. 29	39. 29. 3
30		31. 20. 0	29. 41. 54	28. 3. 46	26. 25. 34
31	Antares.	64. 6. 35	62. 27. 33	60. 48. 24	59. 9. 8

JANUARY 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

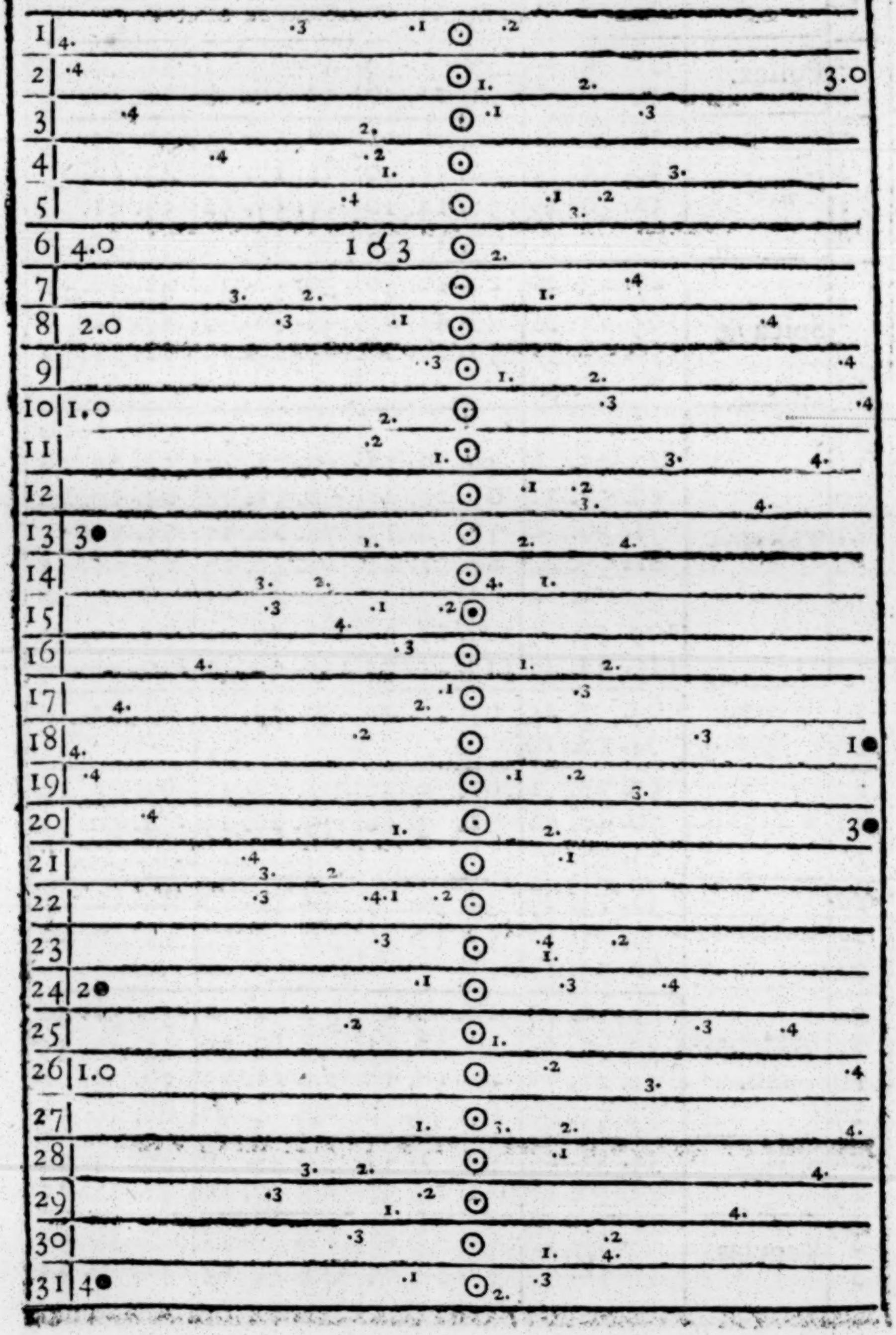
Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Pollux.	31. 36. 22	33. 4. 26	34. 33. 6	36. 2. 22
2		43. 36. 40	45. 8. 56	46. 41. 35	48. 14. 38
3		56. 5. 28			
3	Regulus.	19. 9. 57	20. 46. 50	22. 24. 5	24. 1. 41
4		32. 14. 51	33. 54. 27	35. 34. 22	37. 14. 35
5		45. 40. 20	47. 22. 28	49. 4. 55	50. 47. 41
6		59. 26. 15	61. 10. 56	62. 55. 56	64. 41. 15
7		73. 32. 41			
7	Spica ♍	20. 20. 4	22. 5. 11	23. 50. 52	25. 37. 4
8		34. 34. 55	36. 23. 37	38. 12. 38	40. 1. 58
9		49. 12. 35	51. 3. 23	52. 54. 23	54. 45. 33
10		64. 3. 18	65. 55. 6	67. 46. 57	69. 38. 50
15	The Sun.	41. 34. 28	43. 8. 13	44. 41. 35	46. 14. 33
16		53. 53. 28	55. 24. 3	56. 54. 15	58. 24. 5
17		65. 47. 38	67. 15. 14	68. 42. 30	70. 9. 25
18		77. 19. 16	78. 44. 18	80. 9. 3	81. 33. 32
19		88. 32. 9	89. 55. 12	91. 18. 3	92. 40. 42
20		99. 31. 15	100. 52. 53	102. 14. 24	103. 35. 48
21		110. 21. 24	111. 42. 18	113. 3. 8	114. 23. 56
22		121. 7. 31			
19	Fomalhaut.	58. 43. 4	60. 4. 3	61. 25. 6	62. 46. 14
20		69. 32. 40	70. 54. 4	72. 15. 28	73. 36. 54
21	α Pegaſi.	65. 8. 47	66. 31. 41	67. 54. 39	69. 17. 40
22		76. 13. 57	77. 37. 25	79. 0. 58	80. 24. 35
23	α Arietis.	43. 46. 11	45. 10. 14	46. 34. 35	47. 59. 15
24		55. 6. 42	56. 32. 59	57. 59. 30	59. 26. 16
25	Aldebaran.	33. 2. 27	34. 33. 24	36. 4. 31	37. 35. 48
26		45. 14. 43	46. 47. 3	48. 19. 35	49. 52. 18
27		57. 38. 43	59. 12. 35	60. 46. 39	62. 20. 54
28		70. 15. 7			
28	Pollux.	28. 36. 16	30. 3. 55	31. 32. 21	33. 1. 32
29		40. 37. 2	42. 9. 42	43. 42. 49	45. 16. 22
30		53. 9. 32			
30	Regulus.	16. 11. 49	17. 49. 5	19. 26. 41	21. 4. 37
31		29. 18. 43	30. 58. 16	32. 38. 3	34. 18. 3
F. 1		42. 41. 17			

JANUARY 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Pollux.	37. 32. 12	39. 2. 34	40. 33. 27	42. 4. 50
2		49. 48. 6	51. 21. 56	52. 56. 6	54. 30. 37
3	Regulus.	25. 39. 39	27. 17. 57	28. 56. 35	30. 35. 33
4		38. 55. 6	40. 35. 56	42. 17. 5	43. 58. 33
5		52. 30. 46	54. 14. 10	55. 57. 52	57. 41. 54
6		66. 26. 5	68. 12. 52	69. 59. 9	71. 45. 46
7	Spica ♍	27. 23. 46	29. 10. 56	30. 58. 32	32. 46. 32
8		41. 51. 35	43. 41. 28	45. 31. 37	47. 22. 0
9		56. 36. 51	58. 28. 18	60. 19. 53	62. 11. 33
10		71. 30. 44			
14	The Sun.			38. 25. 49	40. 0. 20
15		47. 47. 8	49. 19. 18	50. 51. 5	52. 22. 28
16		59. 53. 31	61. 22. 35	62. 51. 18	64. 19. 39
17		71. 36. 0	73. 2. 17	74. 28. 15	75. 53. 55
18		82. 57. 44	84. 21. 41	85. 45. 24	87. 8. 53
19		94. 3. 9	95. 25. 25	96. 47. 31	98. 9. 28
20		104. 57. 5	106. 18. 17	107. 39. 24	109. 0. 26
21		115. 44. 41	117. 5. 24	118. 26. 7	119. 46. 49
19	Fomalhaut.	64. 7. 25	65. 28. 40	66. 49. 58	68. 11. 18
20		74. 58. 19			
20	α Pegaſi.	59. 38. 2	61. 0. 36	62. 23. 15	63. 45. 59
21		70. 40. 47	72. 3. 58	73. 27. 13	74. 50. 33
22		81. 48. 17			
22	α Arietis.	38. 13. 29	39. 36. 7	40. 59. 7	42. 22. 28
23		49. 24. 12	50. 49. 25	52. 14. 55	53. 40. 40
24		60. 53. 16			
24	Aldebaran.	27. 0. 17	28. 30. 35	30. 1. 2	31. 31. 40
25		39. 7. 15	40. 38. 51	42. 10. 38	43. 42. 35
26		51. 25. 13	52. 58. 18	54. 31. 35	56. 5. 3
27		63. 55. 21	65. 30. 0	67. 4. 50	68. 39. 53
28	Pollux.	34. 31. 25	36. 1. 57	37. 33. 6	39. 4. 49
29		46. 50. 18	48. 24. 37	49. 59. 16	51. 34. 15
30	Regulus.	22. 42. 53	24. 21. 26	26. 0. 16	27. 39. 22
31		35. 58. 17	37. 38. 44	39. 19. 23	41. 0. 14

Configurations of the SATELLITES of JUPITER at 6 o' th' Clock in the Evening.



FEBRUARY 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	Tu.	
2	W.	*Purification of V. Mary.*
3	Th.	Blas. On mor. of Purif. [3 ret.
4	F.	
5	Sa.	Agatha.
6	*Su.*	*Sexageſima-Sunday.*
7	M.	
8	Tu.	
9	W.	
10	Th.	In 8 days of Purif. 4 ret.
11	F.	
12	Sa.	Hilary Term ends.
13	*Su.*	*Quinquageſima, or Shrove-* [*Sunday.*
14	M.	Valentine.
15	Tu.	
16	W.	*Aſh-Wedneſday.*
17	Th.	
18	F.	
19	Sa.	
20	*Su.*	*1ſt Sunday in Lent.*
21	M.	
22	Tu.	
23	W.	
24	Th.	*St. Matthias.*
25	F.	
26	Sa.	
27	*Su.*	*2d Sunday in Lent.*
28	M.	

Phaſes of the Moon.

	D. H. M.
Laſt Quarter —	3. 14. 56
New Moon —	10. 8. 39
Firſt Quarter —	17. 23. 55
Full Moon —	25. 22. 30

Other Phenomena.

D.
1. ☾ θ ♍ 10^{h}. 8′.
2. ☾ κ ♍ 14^{h}. 35′.
4. ☾ γ ♎ 2^{h}. 2′.
☾ η ♎ 5^{h}. 49′.
☾ θ ♎ 10^{h}. 5′.
8. ☾ β ♑ 20^{h}. 39′.
13. ☾ ♃ 20^{h}. 29′.
18. ☉ enters ♓ at 0^{h}. 12′.
☾ γ ♉ 5^{h}. 18′.
☾ 1 ad δ ♉ 7^{h}. 27′.
☾ 2 ad δ ♉ 7^{h}. 58′.
☾ α ♉ 13^{h}. 22′.
24. ☾ ξ ♌ 10^{h}. 40′.
☾ o ♌ Im. 15^{h}. 53′. *
$13\frac{1}{2}$′ S. of ☽'s cent.
Em. 16^{h}. 22′. *
14′ S.
26. ☾ τ ♌ 17^{h}. 12′.
27. ☾ β ♍ 3^{h}. 10′.
☾ η ♍ 16^{h}. 50′.
28. ☾ θ ♍ 16^{h}. 14′.

FEBRUARY 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Afc. in Time.	Sun's Declin. South.	Equat. of Time. Add.	Diff.
		S. D. M. S.	H. M. S.	D. M. S	M. S.	S.
1	Tu.	10. 12. 48. 23	21. 1. 6,5	16.59.11	14. 6,2	7,0
2	W.	10. 13. 49. 11	21. 5. 10,1	16.41.50	14. 13,2	6,2
3	Th.	10. 14. 49. 59	21. 9. 12,9	16.24.11	14. 19,4	5,4
4	F.	10. 15. 50. 46	21. 13. 14,8	16. 6.15	14. 24,8	4,6
5	Sa.	10. 16. 51. 32	21. 17. 16,0	15.48. 2	14. 29,4	3,8
6	*Su.*	10. 17. 52. 17	21. 21. 16,4	15.29.33	14. 33,2	3,1
7	M.	10. 18. 53. 1	21. 25. 16,0	15.10.49	14. 36,3	2,2
8	Tu.	10. 19. 53. 44	21. 29. 14,9	14.51.49	14. 38,5	1,5
9	W.	10. 20. 54. 26	21. 33. 12,9	14.32.34	14. 40,0	0,7
10	Th.	10. 21. 55. 6	21. 37. 10,1	14.13. 4	14. 40,7	0,1
11	F.	10. 22. 55. 45	21. 41. 6,6	13.53.20	14. 40,6	0,8
12	Sa.	10. 23. 56. 22	21. 45. 2,3	13.33.22	14. 39,8	1,6
13	*Su.*	10. 24. 56. 58	21. 48. 57,2	13.13.12	14. 38,2	2,4
14	M.	10. 25. 57. 31	21. 52. 51,3	12.52.49	14. 35,8	3,2
15	Tu.	10. 26. 58. 3	21. 56. 44,7	12.32.13	14. 32,6	3,9
16	W.	10. 27. 58. 33	22. 0. 37,4	12.11.25	14. 28,7	4,6
17	Th.	10. 28. 59. 2	22. 4. 29,4	11.50.26	14. 24,1	5,3
18	F.	10. 29. 59. 28	22. 8. 20,6	11.29.16	14. 18,8	6,0
19	Sa.	11. 0. 59. 52	22. 12. 11,1	11. 7.55	14. 12,8	6,8
20	*Su.*	11. 2. 0. 14	22. 16. 0,9	10.46.24	14. 6,0	7,4
21	M.	11. 3. 0. 35	22. 19. 50,0	10.24.42	13. 58,6	8,0
22	Tu.	11. 4. 0. 53	22. 23. 38,5	10. 2.52	13. 50,6	8,7
23	W.	11. 5. 1. 9	22. 27. 26,3	9.40.53	13. 41,9	9,4
24	Th.	11. 6. 1. 23	22. 31. 13,5	9.18.45	13. 32,5	10,0
25	F.	11. 7. 1. 35	22. 35. 0,1	8.56.29	13. 22,5	10,5
26	Sa.	11. 8. 1. 45	22. 38. 46,1	8.34. 5	13. 12,0	11,0
27	*Su.*	11. 9. 1. 54	22. 42. 31,5	8.11.33	13. 1,0	11,6
28	M.	11. 10. 2. 1	22. 46. 16,4	7.48.54	12. 49,4	12,1

FEBRUARY 1774.

Days.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	16. 16,5	1. 8,1	2. 32,1	9. 993848	5. 24. 25
7	16. 15,5	1. 7,4	2. 31,8	9. 994329	5. 24. 6
13	16. 14,3	1. 6,7	2. 31,4	9. 994850	5. 23. 47
19	16. 13,0	1. 6,1	2. 31,0	9. 995406	5. 23. 28
25	16. 11,6	1. 5,6	2. 30,5	9. 996015	5. 23. 9

Eclipſes of the SATELLITES of JUPITER.

I. Satellite. Emerſions.		II. Satellite. Emerſions.		III. Satellite.	
Days	H. M. S.	Days	H. M. S.	Days	H. M. S.
1	11. 36. 57	4	0. 40. 33	3	16. 19. 44 I
3	6* 5. 44	7	13. 58. 11	3	18. 27. 46 E
5	0. 34. 33	11	3. 15. 57	10	20. 22. 34 I
6	19. 3. 26	14	16. 33. 51	10	22. 29. 8 E
8	13. 32. 19	18	5*51. 55	18	0. 25. 54 I
10	8* 1. 16	21	19. 10. 5	18	2. 31. 8 E
12	2. 30. 13	25	8. 28. 24	25	4. 29. 43 I
13	20. 59. 14	28	21. 46. 48	25	6*33. 38 E
15	15. 28. 15				
17	9. 57. 22				
19	4. 26. 27				
20	22. 55. 36				
22	17. 24. 45				
24	11. 53. 58				
26	6*23. 10				
28	0. 52. 23				

IV. Satellite.		Conj.
9	2. 43	Inf.
17	11. 52	Sup.
25	21. 2	Inf.

FEBRUARY 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſ. over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
MERCURY. Sup. ☌ $26^{d}\ 9\frac{3}{4}^{h}$.						
1	8. 16. 23	3. 34 S	9. 25. 28	1. 17 S	22. 20 S	22. 52
7	9. 3. 5	5. 9	10. 4. 46	1. 45	20. 48	23. 8
13	9. 20. 43	6. 20	10. 14. 33	2. 2	18. 26	23. 25
19	10. 10. 11	6. 56	10. 24. 52	2. 5	15. 13	23. 42
25	11. 2. 34	6. 42	11. 5. 46	1. 53	11. 9	0. 1
VENUS.						
1	3. 11. 50	1. 33 N	11. 27. 49	2. 8 N	1. 6 N	2. 48
7	3. 21. 34	2. 3	0. 2. 14	3. 3	3. 42	2. 38
13	4. 1. 19	2. 28	0. 5. 59	4. 2	6. 5	2. 26
19	4. 11. 4	2. 49	0. 8. 49	5. 3	8. 9	2. 13
25	4. 20. 49	3. 6	0. 10. 36	6. 7	9. 50	1. 54
MARS.						
1	10. 8. 49	1. 50 S	10. 10. 28	1. 4 S	18. 41 S	23. 52
7	10. 12. 34	1. 50	10. 15. 13	1. 5	17. 21	23. 47
13	10. 16. 21	1. 51	10. 19. 56	1. 5	15. 53	23. 42
19	10. 20. 9	1. 51	10. 24. 40	1. 5	14. 20	23. 37
25	10. 23. 57	1. 50	10. 29. 23	1. 5	12. 43	23. 32
JUPITER.						
1	0. 15. 58	1. 19 S	0. 6. 42	1. 11 S	1. 34 N	3. 25
7	0. 16. 31	1. 18	0. 7. 52	1. 10	2. 3	3. 5
13	0. 17. 4	1. 18	0. 9. 4	1. 9	2. 33	2. 46
19	0. 17. 37	1. 18	0. 10. 20	1. 8	3. 3	2. 28
25	0. 18. 10	1. 18	0. 11. 38	1. 7	3. 35	2. 9
SATURN.						
1	5. 21. 27	2. 10 N	5. 25. 31	2. 21 N	3. 56 N	14. 44
7	5. 21. 39	2. 10	5. 25. 12	2. 22	4. 5	14. 19
13	5. 21. 51	2. 11	5. 24. 51	2. 24	4. 15	13. 54
19	5. 22. 3	2. 11	5. 24. 27	2. 25	4. 25	13. 29
25	5. 22. 16	2. 11	5. 24. 2	2. 26	4. 36	13. 5

FEBRUARY 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midnight.
		S. D. M. S.	S. D. M. S.	D. M. S.	D. M. S.
1	Tu.	6. 9. 22. 44	6. 16. 8. 27	1. 29. 5 N	2. 3. 38 N
2	W.	6. 22. 57. 34	6. 29. 49. 51	2. 36. 42	3. 7. 49
3	Th.	7. 6. 45. 28	7. 13. 44. 26	3. 36. 24	4. 2. 2
4	F.	7. 20. 46. 35	7. 27. 51. 54	4. 24. 14	4. 42. 32
5	Sa.	8. 5. 0. 7	8. 12. 10. 57	4. 56. 37	5. 6. 8
6	*Su.*	8. 19. 23. 58	8. 26. 38. 44	5. 10. 51	5. 10. 38
7	M.	9. 3. 54. 37	9. 11. 10. 56	5. 5. 27	4. 55. 21
8	Tu.	9. 18. 26. 57	9. 25. 41. 54	4. 40. 29	4. 21. 7
9	W.	10. 2. 54. 53	10. 10. 5. 10	3. 57. 40	3. 30. 34
10	Th.	10. 17. 12. 4	10. 24. 14. 51	3. 0. 24	2. 27. 42
11	F.	11. 1. 12. 55	11. 8. 5. 55	1. 53. 7	1. 17. 14
12	Sa.	11. 14. 53. 29	11. 21. 35. 25	0. 40. 46 N	0. 4. 5 N
13	*Su.*	11. 28. 11. 40	0. 4. 42. 21	0. 32. 7 S	1. 7. 25 S
14	M.	0. 11. 7. 36	0. 17. 27. 34	1. 41. 22	2. 13. 38
15	Tu.	0. 23. 42. 51	0. 29. 53. 46	2. 43. 55	3. 11. 53
16	W.	1. 6. 0. 50	1. 12. 4. 31	3. 37. 23	4. 0. 12
17	Th.	1. 18. 5. 26	1. 24. 4. 16	4. 20. 12	4. 37. 14
18	F.	2. 0. 1. 27	2. 5. 57. 46	4. 51. 12	5. 1. 59
19	Sa.	2. 11. 53. 44	2. 17. 49. 53	5. 9. 34	5. 13. 50
20	*Su.*	2. 23. 46. 55	2. 29. 45. 23	5. 14. 44	5. 12. 15
21	M.	3. 5. 45. 40	3. 11. 48. 22	5. 6. 21	4. 57. 1
22	Tu.	3. 17. 53. 47	3. 24. 2. 18	4. 44. 15	4. 28. 8
23	W.	4. 0. 14. 20	4. 6. 30. 0	4. 8. 42	3. 46. 8
24	Th.	4. 12. 49. 32	4. 19. 13. 4	3. 20. 32	2. 52. 10
25	F.	4. 25. 40. 35	5. 2. 12. 9	2. 21. 15	1. 48. 13
26	Sa.	5. 8. 47. 34	5. 15. 26. 54	1. 13. 21	0. 37. 7 S
27	*Su.*	5. 22. 9. 49	5. 28. 56. 15	0. 0. 4 S	0. 37. 21 N
28	M.	6. 5. 45. 49	6. 12. 38. 23	1. 14. 32 N	1. 50. 56

FEBRUARY 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſc. at Midn.	☽'s Declination at Noon.	☽'s Declination at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	Tu.	22	16. 8	189. 12	195. 40	2. 21 S	4. 28 S
2	W.	23	16. 59	202. 13	208. 52	6. 31	8. 30
3	Th.	24	17. 52	215. 37	222. 31	10. 23	12. 7
4	F.	25	18. 47	229. 32	236. 42	13. 43	15. 7
5	Sa.	26	19. 44	244. 0	251. 24	16. 18	17. 13
6	*Su.*	27	20. 43	258. 54	266. 29	17. 53	18. 15
7	M.	28	21. 42	274. 6	281. 44	18. 19	18. 6
8	Tu.	29	22. 40	289. 20	296. 51	17. 34	16. 45
9	W.	30	23. 36	304. 16	311. 33	15. 40	14. 22
10	Th.	1	☌	318. 43	325. 44	12. 50	11. 8
11	F.	2	0. 30	332. 34	339. 16	9. 17	7. 21
12	Sa.	3	1. 20	345. 49	352. 15	5. 20	3. 17 S
13	*Su.*	4	2. 9	358. 33	4. 46	1. 13 S	0. 50 N
14	M.	5	2. 56	10. 54	16. 57	2. 51 N	4. 48
15	Tu.	6	3. 42	22. 58	28. 57	6. 40	8. 27
16	W.	7	4. 27	34. 55	40. 53	10. 7	11. 40
17	Th.	8	5. 12	46. 52	52. 52	13. 4	14. 20
18	F.	9	5. 58	58. 54	64. 59	15. 26	16. 22
19	Sa.	10	6. 45	71. 6	77. 16	17. 7	17. 42
20	*Su.*	11	7. 32	83. 28	89. 44	18. 5	18. 16
21	M.	12	8. 20	96. 2	102. 22	18. 14	18. 1
22	Tu.	13	9. 9	108. 44	115. 7	17. 34	16. 56
23	W.	14	9. 58	121. 31	127. 55	16. 4	15. 1
24	Th.	15	10. 47	134. 19	140. 43	13. 47	12. 21
25	F.	16	11. 36	147. 7	153. 32	10. 46	9. 1
26	Sa.	17	12. 25	159. 57	166. 22	7. 9	5. 10
27	*Su.*	18	13. 15	172. 49	179. 17	3. 7 N	1. 0 N
28	M.	19	14. 6	185. 48	192. 22	1. 9 S	3. 18 S

FEBRUARY 1774.

Days of the Month.	Days of the Week.	Semidʳ. ☽ at Noon.	Semidʳ. ☽ at Midnight.	Hor. Par. ☽ at Noon.	Hor. Par. ☽ at Midnight.	Proport. Logar. at Noon.	Proport. Logar. at Midn.
		M. S.	M. S.	M. S.	M. S.		
1	Tu.	15. 49	15. 53	58. 3	58. 17	4915	4897
2	W.	15. 57	16. 0	58. 31	58. 44	4880	4864
3	Th.	16. 4	16. 7	58. 57	59. 9	4848	4833
4	F.	16. 10	16. 13	59. 21	59. 31	4819	4806
5	Sa.	16. 16	16. 18	59. 40	59. 48	4795	4786
6	*Su.*	16. 19	16. 20	59. 54	59. 58	4778	4773
7	M.	16. 21	16. 21	60. 0	59. 59	4771	4772
8	Tu.	16. 20	16. 18	59. 55	59. 49	4777	4784
9	W.	16. 16	16. 12	59. 40	59. 28	4795	4810
10	Th.	16. 8	16. 3	59. 13	58. 56	4828	4849
11	F.	15. 58	15. 53	58. 37	58. 16	4872	4898
12	Sa.	15. 47	15. 41	57. 54	57. 32	4926	4953
13	*Su.*	15. 34	15. 28	57. 9	56. 46	4983	5012
14	M.	15. 22	15. 16	56. 24	56. 3	5040	5067
15	Tu.	15. 11	15. 6	55. 43	55. 25	5093	5116
16	W.	15. 2	14. 58	55. 9	54. 55	5137	5155
17	Th.	14. 55	14. 52	54. 44	54. 35	5170	5182
18	F.	14. 51	14. 50	54. 29	54. 25	5190	5195
19	Sa.	14. 49	14. 50	54. 24	54. 25	5197	5195
20	*Su.*	14. 51	14. 53	54. 30	54. 36	5189	5181
21	M.	14. 55	14. 58	54. 44	54. 55	5170	5155
22	Tu.	15. 1	15. 5	55. 7	55. 21	5140	5122
23	W.	15. 9	15. 14	55. 37	55. 53	5100	5080
24	Th.	15. 19	15. 24	56. 11	56. 29	5056	5033
25	F.	15. 29	15. 34	56. 48	57. 6	5009	4986
26	Sa.	15. 38	15. 43	57. 24	57. 41	4964	4942
27	*Su.*	15. 47	15. 52	57. 57	58. 12	4922	4903
28	M.	15. 56	15. 59	58. 26	58. 38	4886	4871

FEBRUARY 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Antares.	57. 29. 45	55. 50. 16	54. 10. 43	52. 31. 4
2		44. 11. 42	42. 31. 45	40. 51. 50	39. 12. 0
3		30. 54. 56	29. 16. 6	27. 38. 0	26. 0. 38
4		18. 10. 4			
1	The Sun.			120. 17. 28	118. 43. 26
2		110. 50. 15	109. 15. 4	107. 39. 42	106. 4. 8
3		98. 3. 33	96. 26. 52	94. 49. 59	93. 12. 55
4		85. 5. 4	83. 26. 57	81. 48. 39	80. 10. 11
5		71. 55. 36	70. 16. 13	68. 36. 42	66. 57. 3
6		58. 36. 56	56. 56. 35	55. 16. 8	53. 35. 36
7		45. 11. 57	43. 31. 6	41. 50. 14	40. 9. 22
12	α Arietis.	50. 11. 32	48. 34. 58	46. 59. 0	45. 23. 39
13		37. 37. 19	36. 6. 29	34. 36. 35	33. 7. 38
14	Aldebaran.	55. 30. 31	53. 54. 45	52. 19. 19	50. 44. 12
15		42. 53. 17	41. 20. 0	39. 47. 1	38. 14. 18
16		30. 34. 35	29. 3. 22	27. 32. 23	26. 1. 37
17		18. 30. 36			
17	Pollux.	62. 52. 35	61. 25. 4	59. 57. 45	58. 30. 39
18		51. 18. 8	49. 52. 10	48. 26. 23	47. 0. 48
19		39. 55. 56			
19	Regulus.	74. 54. 26	73. 25. 56	71. 57. 23	70. 28. 48
20		63. 5. 7	61. 36. 9	60. 7. 6	58. 37. 55
21		51. 10. 24	49. 40. 28	48. 10. 23	46. 40. 8
22		39. 6. 18	37. 34. 59	36. 3. 28	34. 31. 45
23		26. 50. 2	25. 17. 7	23. 44. 1	22. 10. 43
24	Spica ♍	67. 47. 45	66. 12. 30	64. 37. 0	63. 1. 14
25		54. 58. 33	53. 21. 14	51. 43. 41	50. 5. 53
26		41. 53. 32	40. 14. 23	38. 35. 3	36. 55. 32
27		28. 35. 53			
27	Antares.	74. 29. 50	72. 49. 39	71. 9. 18	69. 28. 47
28		61. 4. 2	59. 22. 42	57. 41. 17	55. 59. 47
M.1		47. 31. 39			

FEBRUARY 1774.

Diſtances of ☽'s Center from ⊙, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S	D. M. S.
1	Antares.	50. 51. 21	49. 11. 30	47. 31. 35	45. 51. 39
2		37. 32. 16	35. 52. 32	34. 13. 4	32. 33. 50
3		24. 24. 0	22. 48. 31	21. 14. 15	19. 41. 23
1	The Sun.	117. 9. 12	115. 34. 45	114. 0. 6	112. 25. 16
2		104. 28. 24	102. 52. 28	101. 16. 21	99. 40. 2
3		91. 35. 41	89. 58. 18	88. 20. 44	86. 42. 59
4		78. 31. 34	76. 52. 48	75. 13. 53	73. 34. 49
5		65. 17. 16	63. 37. 21	61. 57. 20	60. 17. 11
6		51. 54. 59	50. 14. 18	48. 33. 34	46. 52. 47
7		38. 28. 30			
11	*α* Arietis.	56. 43. 8	55. 4. 30	53. 26. 20	51. 48. 46
12		43. 48. 57	42. 14. 54	40. 41. 34	39. 9. 2
13		31. 39. 41			
13	Aldebaran.	61. 57. 7	60. 19. 56	58. 43. 6	57. 6. 38
14		49. 9. 25	47. 34. 56	46. 0. 45	44. 26. 52
15		36. 41. 51	35. 9. 40	33. 37. 43	32. 6. 2
16		24. 31. 2	23. 0. 39	21. 30. 28	20. 0. 27
17	Pollux.	57. 3. 45	55. 37. 4	54. 10. 35	52. 44. 16
18		45. 35. 24	44. 10. 13	42. 45. 14	41. 20. 29
19	Regulus.	69. 0. 10	67. 31. 29	66. 2. 46	64. 33. 59
20		57. 8. 40	55. 39. 18	54. 9. 48	52. 40. 10
21		45. 9. 44	43. 39. 9	42. 8. 23	40. 37. 26
22		32. 59. 50	31. 27. 41	29. 55. 20	28. 22. 47
23		20. 37. 14			
23	Spica ♍	74. 6. 5	72. 31. 54	70. 57. 27	69. 22. 44
24		61. 25. 13	59. 48. 56	58. 12. 24	56. 35. 36
25		48. 27. 51	46. 49. 34	45. 11. 6	43. 32. 25
26		35. 15. 52	33. 36. 4	31. 56. 8	30. 16. 4
27	Antares.	67. 48. 6	66. 7. 16	64. 26. 19	62. 45. 14
28		54. 18. 13	52. 36. 36	50. 54. 58	49. 13. 19

FEBRUARY 1774.

Diſtances of Moon's Center from ☉, and from Stars weſt of her.

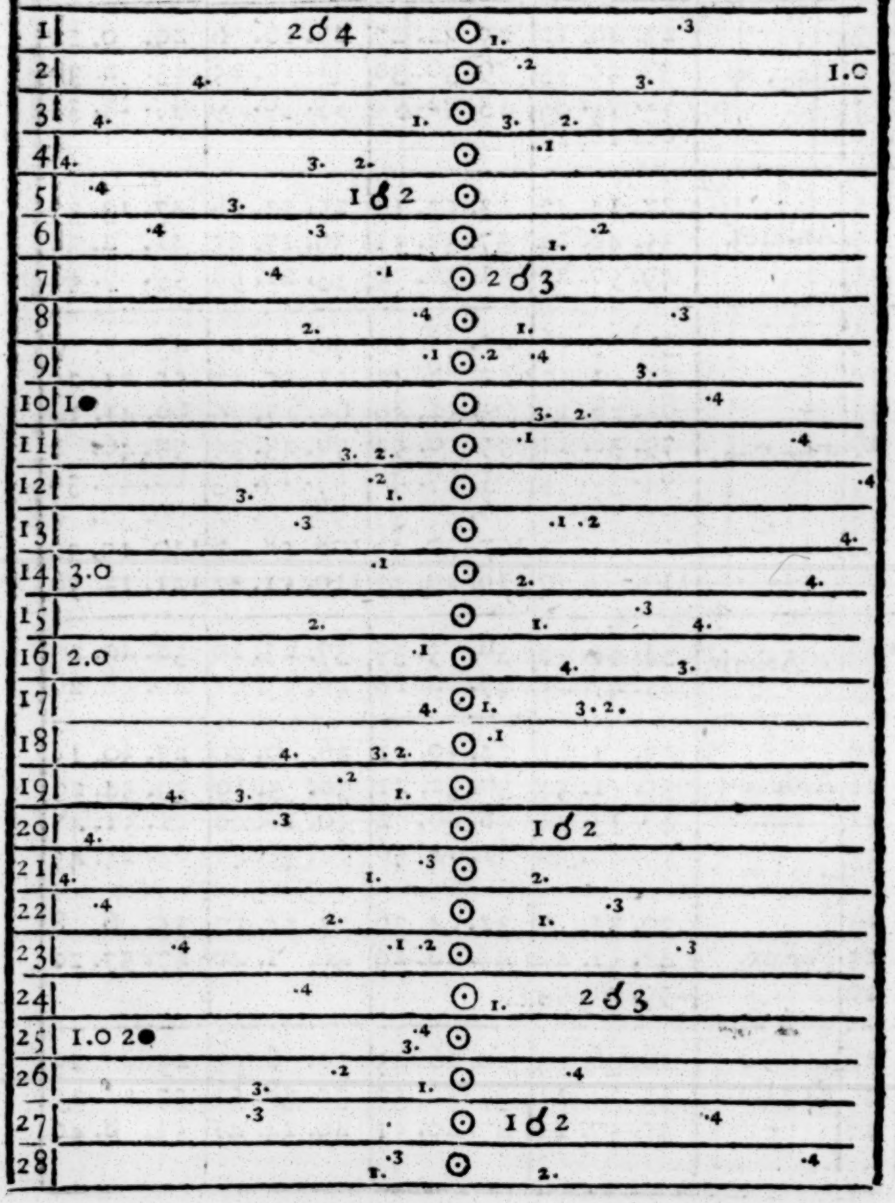
Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Regulus.	42. 41. 17	44. 22. 31	46. 3. 56	47. 45. 34
2		56. 16. 46	57. 59. 34	59. 42. 33	61. 25. 43
3		70. 4. 23			
3	Spica ♍	17. 1. 10	18. 42. 22	20. 24. 7	22. 6. 25
4		30. 44. 35	32. 29. 15	34. 14. 12	35. 59. 25
5		44. 48. 47	46. 35. 16	48. 21. 55	50. 8. 45
6		59. 5. 6	60. 52. 46	62. 40. 33	64. 28. 26
7	Antarcs.	28. 55. 10	30. 37. 33	32. 20. 35	34. 4. 16
8		42. 47. 55	44. 33. 21	46. 18. 54	48. 4. 35
9		56. 53. 30			
14	The Sun.	45. 11. 33	46. 39. 37	48. 7. 21	49. 34. 46
15		56. 47. 22	58. 13. 0	59. 38. 21	61. 3. 26
16		68. 5. 4	69. 28. 40	70. 52. 3	72. 15. 13
17		79. 8. 18	80. 30. 27	81. 52. 27	83. 14. 20
18		90. 1. 59	91. 23. 16	92. 44. 30	94. 5. 41
19		100. 51. 11	102. 12. 15	103. 33. 21	104. 54. 29
20		111. 40. 55	113. 2. 27	114. 24. 5	115. 45. 50
18	α Arietis.	29. 25. 27	30. 44. 14	32. 3. 42	33. 23. 47
19		40. 12. 1	41. 34. 52	42. 58. 2	44. 21. 32
20		51. 23. 20			
20	Aldebaran.	17. 4. 27	18. 33. 32	20. 2. 44	21. 31. 59
21		29. 0. 10	30. 30. 15	32. 0. 31	33. 30. 57
22		41. 5. 52	42. 37. 27	44. 9. 15	45. 41. 17
23		53. 25. 2	54. 58. 30	56. 32. 13	58. 6. 12
24		66. 0. 5			
24	Pollux.	24. 47. 25	26. 12. 40	27. 39. 5	29. 6. 35
25		36. 38. 2	38. 10. 33	39. 43. 41	41. 17. 26
26		49. 13. 27	50. 50. 0	52. 26. 56	54. 4. 14
27	Regulus.	25. 28. 13	27. 9. 21	28. 50. 46	30. 32. 27
28		39. 4. 11	40. 47. 9	42. 30. 19	44. 13. 40
M.1		52. 52. 47			

FEBRUARY 1774.

Diſtances of ☽'s center from ☉, and from ſtars weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Regulus.	49. 27. 23	51. 9. 26	52. 51. 41	54. 34. 8
2		63. 9. 4	64. 52. 37	66. 36. 21	68. 20. 17
3	Spica ♍	23. 49. 12	25. 32. 27	27. 16. 6	29. 0. 10
4		37. 44. 53	39. 30. 32	41. 16. 25	43. 2. 30
5		51. 55. 44	53. 42. 52	55. 30. 9	57. 17. 33
6		66. 16. 26			
6	Antares.	22. 14. 47	23. 53. 19	25. 32. 58	27. 13. 37
7		35. 48. 24	37. 32. 51	39. 17. 35	41. 2. 38
8		49. 50. 21	51. 36. 9	53. 21. 58	55. 7. 46
13	The Sun.	39. 15. 56	40. 45. 21	42. 14. 25	43. 43. 9
14		51. 1. 53	52. 28. 42	53. 55. 12	55. 21. 25
15		62. 28. 15	63. 52. 49	65. 17. 9	66. 41. 14
16		73. 38. 11	75. 0. 58	76. 23. 35	77. 46. 1
17		84. 36. 5	85. 57. 42	87. 19. 13	88. 40. 39
18		95. 26. 50	96. 47. 57	98. 9. 2	99. 30. 6
19		106. 15. 39	107. 36. 53	108. 58. 8	110. 19. 30
20		117. 7. 40	118. 29. 37	119. 51. 42	121. 13. 56
18	*α* Arietis.	34. 44. 27	36. 5. 39	37. 27. 20	38. 49. 29
19		45. 45. 21	47. 9. 28	48. 33. 51	49. 58. 26
20	Aldebaran.	23. 1. 21	24. 30. 51	26. 0. 29	27. 30. 15
21		35. 1. 34	36. 32. 21	38. 3. 19	39. 34. 29
22		47. 13. 32	48. 46. 2	50. 18. 48	51. 51. 48
23		59. 40. 26	61. 14. 56	62. 49. 42	64. 24. 45
24	Pollux.	30. 35. 7	32. 4. 36	33. 34. 57	35. 6. 8
25		42. 51. 43	44. 26. 29	46. 1. 40	47. 37. 20
26		55. 41. 53			
26	Regulus.	18. 46. 54	20. 26. 43	22. 6. 53	23. 47. 23
27		32. 14. 22	33. 56. 30	35. 38. 51	37. 21. 25
28		45. 57. 11	47. 40. 51	49. 24. 41	51. 8. 40

Configurations of the SATELLITES of JUPITER at 7 o'th' Clock in the Evening.



MARCH 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	Tu.	David.
2	W.	Chad.
3	Th.	
4	F.	
5	Sa.	*Prs. of Heſſe born.*
6	*Su.*	*3d Sunday in Lent.*
7	M.	Perpetua.
8	Tu.	
9	W.	
10	Th.	
11	F.	
12	Sa.	Gregory M.
13	*Su.*	*4th Sunday in Lent. Mid-*
14	M.	*[lent Sunday.*
15	Tu.	
16	W.	
17	Th.	
18	F.	Edw. K. of Weſt. Sax.
19	Sa.	*Prs. Louiſa Ann born.*
20	*Su.*	*5th Sunday in Lent.*
21	M.	Benedict.
22	Tu.	
23	W.	
24	Th.	[Cam. T. ends.
25	F.	*Annunciation of V. Mary.*
26	Sa.	Oxford Term ends.
27	*Su.*	*6th Sunday in Lent. Palm*
28	M.	*[Sunday.*
29	Tu.	
30	W.	
31	Th.	

Phaſes of the Moon.

	D. H. M.
Laſt Quarter —	4. 22. 21
New Moon —	11. 21. 55
Firſt Quarter —	19. 20. 31
Full Moon —	27. 11. 28

Other Phenomena.

D.

1. ♀ Stationary.
☾ κ ♍ 21^{h}. 17′.
3. ☾ γ ♎ 7^{h}. 27′.
☾ η ♎ 11^{h}. 15′.
8. ☾ β ♑ 4^{h}. 16′.
10. ☾ θ ♒ 6^{h}. 56′.
11. ☉ eclipſed, inviſible.
13. ☌ ☿ ♀ diff. Lat. 7°. 50′.
17. ☾ γ ♉ 13^{h}. 38′.
☾ 1 ad ☌ ♉ 15^{h}. 47′.
☾ 2 ad ☌ ♉ 16^{h}. 18′.
☾ α ♉ 21^{h}. 41′.
19. ♃ ζ ♓ diff. Lat. 51′.
☌ ☿ ♃ diff. Lat. 2°. 40′.
20. ☉ enters ♈ at 0^{h}. 43′.
23. ☾ ξ ♌ 19^{h}. 55′.
24. ☾ ο ♌ 0^{h}. 49′.
26. ☾ τ ♌ 2^{h}. 24′.
☾ β ♍ 12^{h}. 15′.
27. ☾ η ♍ 1^{h}. 41′.
28. ☾ ϑ ♍ 0^{h}. 37′.
29. ☾ κ ♍ 3^{h}. 54′.
30. ☾ γ ♎ 14^{h}. 8′.
☾ η ♎ 17^{h}. 50′.

MARCH 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Afc. in Time.	Sun's Declin. South.	Equat. of Time. Add.	Diff
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	Tu.	11. 11. 2. 6	22.59. 0,9	7. 26. 9	12. 37,3	12,6
2	W.	11. 12. 2. 10	22.53.44,9	7. 3. 16	12. 24,7	13,0
3	Th.	11. 13. 2. 12	22.57.28,4	6. 40. 18	12. 11,7	13,5
4	F.	11. 14. 2. 12	23. 1.11,4	6. 17. 15	11. 58,2	13,9
5	Sa.	11. 15. 2. 11	23. 4.54,0	5. 54. 6	11. 44,3	14,4
6	*Su.*	11. 16. 2. 8	23. 8.36,1	5. 30. 52	11. 29,9	14,7
7	M.	11. 17. 2. 4	23.12.17,9	5. 7. 33	11. 15,2	15,1
8	Tu.	11. 18. 1. 58	23.15.59,4	4. 44. 10	11. 0,1	15,5
9	W.	11. 19. 1. 50	23.19.40,5	4. 20. 44	10. 44,6	15,7
10	Th.	11. 20. 1. 41	23.23.21,2	3. 57. 14	10. 28,9	16,1
11	F.	11. 21. 1. 30	23.27. 1,6	3. 33. 42	10. 12,8	16,4
12	Sa.	11. 22. 1. 17	23.30.41,7	3. 10. 7	9. 56,4	16,7
13	*Su.*	11. 23. 1. 2	23.34.21,5	2. 46. 29	9. 39,7	16,9
14	M.	11. 24. 0. 45	23.38. 1,1	2. 22. 50	9. 22,8	17,2
15	Tu.	11. 25. 0. 25	23.41.40,4	1. 59. 10	9. 5,6	17,5
16	W.	11. 26. 0. 4	23.45.19,4	1. 35. 29	8. 48,1	17,7
17	Th.	11. 26. 59. 40	23.48.58,2	1. 11. 47	8. 30,4	17,9
18	F.	11. 27. 59. 14	23.52.36,8	0. 48. 5	8. 12,5	18,1
19	Sa.	11. 28. 58. 45	23.56.15,3	0. 24. 23	7. 54,4	18,3
20	*Su.*	11. 29. 58. 14	23.59.53,5	0. 0. 42	7. 36,1	18,3
				North.		
21	M.	0. 0. 57. 41	0. 3.31,6	0. 22. 58	7. 17,8	18,5
22	Tu.	0. 1. 57. 6	0. 7. 9,7	0. 46. 37	6. 59,3	18,6
23	W.	0. 2. 56. 28	0.10.47,6	1. 10. 15	6. 40,7	18,7
24	Th.	0. 3. 55. 47	0.14.25,4	1. 33. 50	6. 22,0	18,8
25	F.	0. 4. 55. 4	0.18. 3,1	1. 57. 23	6. 3,2	18,8
26	Sa.	0. 5. 54. 19	0.21.40,8	2. 20. 53	5. 44,4	18,7
27	*Su.*	0. 6. 53. 33	0.25.18,5	2. 44. 20	5. 25,7	18,8
28	M.	0. 7. 52. 44	0.28.56,3	3. 7. 44	5. 6,9	18,8
29	Tu.	0. 8. 51. 53	0.32.34,1	3. 31. 5	4. 48,1	18,6
30	W.	0. 9. 51. 0	0.36.11,9	3. 54. 22	4. 29,5	18,6
31	Th.	0. 10. 50. 5	0.39.49,8	4. 17. 34	4. 10,9	18,5

Days of the Month.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	16. 10,7	1. 5,3	2. 30,2	9. 996457	5. 22. 56
7	16. 9,2	1. 4,9	2. 29,7	9. 997166	5. 22. 37
13	16. 7,5	1. 4,6	2. 29,2	9. 997888	5. 22. 18
19	16. 5,9	1. 4,4	2. 28,8	9. 998612	5. 21. 59
25	16. 4,2	1. 4,3	2. 28,3	9. 999344	5. 21. 40

The Eclipſes of JUPITER's Satellites will not be viſible this Month, JUPITER being too near the Sun.

MARCH 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſage over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
MERCURY. Gr. El. 24^{d}.						
1	11. 19. 45	5. 49 S	11. 13. 21	1. 33 S	7. 59 S	0. 11
7	0. 19. 46	3. 5 S	11. 25. 2	0. 47 S	2. 42 S	0. 31
13	1. 24. 56	1. 6 N	0. 6. 30	0. 18 N	2. 52 N	0. 49
19	3. 2. 38	5. 6	0. 16. 30	1. 33	7. 56	1. 2
25	4. 8. 9	6. 56	0. 23. 29	2. 39	11. 23	1. 5
VENUS. Inf. ☌ $22^{d}. 21^{h}$.						
1	4. 27. 19	3. 14 N	0. 11. 1	6. 48 N	10. 37 N	1. 40
7	5. 7. 3	3. 21	0. 10. 27	7. 42	11. 12	1. 14
13	5. 16. 48	3. 23	0. 8. 28	8. 17	10. 58	0. 43
19	5. 26. 31	3. 19	0. 5. 15	8. 27	9. 50	0. 10
25	6. 6. 14	3. 9	0. 1. 28	8. 2	7. 57	23. 29
MARS.						
1	10. 26. 29	1. 50 S	11. 2. 33	1. 4 S	11. 35 S	23. 30
7	11. 0. 16	1. 49	11. 7. 17	1. 3	9. 51	23. 26
13	11. 4. 5	1. 47	11. 11. 59	1. 3	8. 3	23. 21
19	11. 7. 53	1. 45	11. 16. 42	1. 2	6. 12	23. 17
25	11. 11. 42	1. 42	11. 21. 24	1. 1	4. 21	23. 12
JUPITER.						
1	0. 18. 32	1. 18 S	0. 12. 31	1. 7 S	3. 55 N	1. 57
7	0. 19. 5	1. 18	0. 13. 53	1. 6	4 28	1. 40
13	0. 19. 38	1. 18	0. 15. 16	1. 6	5. 1	1. 23
19	0. 20. 11	1. 18	0. 16. 40	1. 5	5. 34	1. 6
25	0. 20. 43	1. 17	0. 18. 5	1. 5	6. 6	0. 50
SATURN. ☍ $12^{d}. 18\frac{3}{4}^{h}$.						
1	5. 22. 24	2. 11 N	5. 23. 44	2. 27 N	4. 45 N	12. 49
7	5. 22. 37	2. 11	5. 23. 15	2. 27	4. 57	12. 25
13	5. 22. 49	2. 12	5. 22. 47	2. 28	5. 8	12. 1
19	5. 23. 1	2. 12	5. 22. 19	2. 28	5. 19	11. 37
25	5. 23. 13	2. 12	5. 21. 51	2. 28	5. 30	11. 14

MARCH 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M.S.
1	Tu.	6. 19. 33. 38	6. 26. 31. 16	2. 25. 54 N	2.58.59 N
2	W.	7. 3. 30. 56	7. 10. 32. 29	3. 29. 30	3.57. 1
3	Th.	7. 17. 35. 29	7. 24. 39. 42	4. 21. 3	4.41. 9
4	F.	8. 1. 44. 49	8. 8. 50. 37	4. 57. 3	5. 8.26
5	Sa.	8. 15. 56. 48	8. 23. 3. 0	5. 15. 6	5.16.57
6	*Su.*	9. 0. 8. 58	9. 7. 14. 25	5. 13. 58	5. 6.14
7	M.	9. 14. 18. 58	9. 21. 22. 25	4. 53. 51	4.37. 0
8	Tu.	9. 28. 24. 18	10. 5. 24. 17	4. 16. 4	3.51.24
9	W.	10. 12. 22. 8	10. 19. 17. 20	3. 23. 24	2.52.36
10	Th.	10. 26. 9. 43	11. 2. 58. 56	2. 19. 26	1.44.36
11	F.	11. 9. 44. 41	11. 16. 26. 36	1. 8. 33 N	0.31.51 N
12	Sa.	11. 23. 4. 42	11. 29. 38. 46	0. 4. 54 S	0.41. 9 S
13	*Su.*	0. 6. 8. 42	0. 12. 34. 29	1. 16. 36	1.50.42
14	M.	0. 18. 56. 9	0. 25. 13. 47	2. 22. 57	2.53.11
15	Tu.	1. 1. 27. 38	1. 7. 37. 53	3. 20. 59	3.46.10
16	W.	1. 13. 44. 47	1. 19. 48. 47	4. 8. 32	4.27.54
17	Th.	1. 25. 50. 14	2. 1. 49. 37	4. 44. 11	4.57.16
18	F.	2. 7. 47. 22	2. 13. 44. 5	5. 7. 3	5.13.31
19	Sa.	2. 19. 40. 16	2. 25. 36. 34	5. 16. 37	5.16.21
20	*Su.*	3. 1. 33. 25	3. 7. 31. 33	5. 12. 42	5. 5.40
21	M.	3. 13. 31. 32	3. 19. 33. 56	4. 55. 18	4.41.34
22	Tu.	3. 25. 39. 12	4. 1. 48. 1	4. 24. 35	4. 4.24
23	W.	4. 8. 0. 50	4. 14. 17. 58	3. 41. 8	3.14.58
24	Th.	4. 20. 39. 58	4. 27. 6. 58	2. 46. 3	2.14.38
25	F.	5. 3. 39. 18	5. 10. 17. 2	1. 41. 4	1. 5.42 S
26	Sa.	5. 17. 0. 13	5. 23. 48. 41	0. 28. 55 S	0. 8.44 N
27	*Su.*	6. 0. 42. 17	6. 7. 40. 40	0. 46. 41 N	[illegible].24.21
28	M.	6. 14. 43. 28	6. 21. 50. 5	2. 1. 10	[illegible].36.23
29	Tu.	6. 28. 59. 54	7. 6. 12. 19	3. 9. 23	[illegible].39.33
30	W.	7. 13. 26. 28	7. 20. 41. 47	4. 6. 18	4.29.12
31	Th.	7. 27. 57. 26	8. 5. 12. 41	4. 47. 45	5. 1.39

MARCH 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſc. at Midn.	☽'s Declinat. at Noon.	☽'s Declin. at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	Tu.	20	14. 57	199. 0	205. 41	5. 25 S	7. 28 S
2	W.	21	15. 51	212. 30	219. 23	9. 26	11. 15
3	Th.	22	16. 46	226. 23	233. 29	12. 55	14. 25
4	F.	23	17. 42	240. 41	247. 58	15. 41	16. 43
5	Sa.	24	18. 39	255. 19	262. 44	17. 30	18. 1
6	*Su.*	25	19. 37	270. 10	277. 36	18. 14	18. 10
7	M.	26	20. 34	285. 0	292. 21	17. 50	17. 12
8	Tu.	27	21. 30	299. 38	306. 48	16. 19	15. 12
9	W.	28	22. 24	313. 51	320. 48	13. 51	12. 19
10	Th.	29	23. 16	327. 36	334. 18	10. 37	8. 48
11	F.	1	☌	340. 52	347. 19	6. 52	4. 52
12	Sa.	2	0. 5	353. 41	359. 57	2. 50 S	0. 46 S
13	*Su.*	3	0. 52	6. 9	12. 17	1. 16 N	3. 16 N
14	M.	4	1. 38	18. 23	24. 26	5. 13	7. 5
15	Tu.	5	2. 25	30. 29	36. 30	8. 51	10. 30
16	W.	6	3. 11	42. 33	48. 36	12. 1	13. 24
17	Th.	7	3. 57	54. 40	60. 45	14. 38	15. 41
18	F.	8	4. 44	66. 52	73. 1	16. 35	17. 17
19	Sa.	9	5. 30	79. 11	85. 24	17. 48	18. 7
20	*Su.*	10	6. 19	91. 38	97. 53	18. 15	18. 10
21	M.	11	7. 7	104. 10	110. 28	17. 54	17. 24
22	Tu.	12	7. 55	116. 47	123. 7	16. 43	15. 49
23	W.	13	8. 44	129. 27	135. 48	14. 44	13. 27
24	Th.	14	9. 33	142. 10	148. 33	12. 0	10. 23
25	F.	15	10. 22	154. 57	161. 23	8. 37	6. 43
26	Sa.	16	11. 13	167. 51	174. 23	4. 42	2. 36 N
27	*Su.*	17	12. 4	180. 58	187. 37	0. 26 N	1. 46 S
28	M.	18	12. 56	194. 20	201. 10	3. 57 S	6. 6
29	Tu.	19	13. 50	208. 5	215. 7	8. 11	10. 9
30	W.	20	14. 46	222. 14	229. 29	11. 59	13. 37
31	Th.	21	15. 44	236. 49	244. 15	15. 3	16. 15

MARCH 1774.

Days of the Month.	Days of the Week.	Semidr. ☽ at Noon.	Semidr. ☽ at Midnight.	Hor. Par. ☽ at Noon.	Hor. Par. ☽ at Midnight.	Proport. Logar. at Noon.	Proport. Logar. at Midn.
		M. S.	M. S.	M. S.	M. S.		
1	Tu.	16. 2	16. 4	58. 49	58. 59	4858	4845
2	W.	16. 6	16. 8	59. 7	59. 13	4835	4828
3	Th.	16. 9	16. 11	59. 18	59. 22	4822	4817
4	F.	16. 11	16. 12	59. 25	59. 26	4813	4812
5	Sa.	16. 12	16. 11	59. 26	59. 25	4812	4813
6	*Su.*	16. 11	16. 10	59. 23	59. 20	4816	4820
7	M.	16. 9	16. 7	59. 15	59. 10	4826	4832
8	Tu.	16. 5	16. 3	59. 3	58. 54	4841	4852
9	W.	16. 0	15. 57	58. 44	58. 32	4864	4878
10	Th.	15. 53	15. 49	58. 19	58. 5	4895	4912
11	F.	15. 45	15. 41	57. 50	57. 33	4931	4952
12	Sa.	15. 36	15. 31	57. 15	56. 56	4975	4999
13	*Su.*	15. 26	15. 21	56. 39	56. 21	5021	5044
14	M.	15. 16	15. 12	56. 3	55. 46	5067	5089
15	Tu.	15. 7	15. 3	55. 30	55. 15	5110	5129
16	W.	15. 0	14. 56	55. 1	54. 50	5148	5162
17	Th.	14. 54	14. 52	54. 40	54. 32	5175	5186
18	F.	14. 50	14. 49	54. 27	54. 24	5193	5197
19	Sa.	14. 49	14. 50	54. 23	54. 26	5198	5194
20	*Su.*	14. 51	14. 53	54. 31	54. 38	5187	5178
21	M.	14. 56	14. 59	54. 48	55. 0	5165	5149
22	Tu.	15. 3	15. 8	55. 15	55. 32	5129	5107
23	W.	15. 13	15. 19	55. 50	56. 11	5084	5056
24	Th.	15. 25	15. 30	56. 33	56. 55	5028	5000
25	F.	15. 37	15. 43	57. 18	57. 41	4971	4942
26	Sa.	15. 49	15. 55	58. 4	58. 25	4913	4887
27	*Su.*	16. 1	16. 6	58. 46	59. 4	4861	4839
28	M.	16. 10	16. 14	59. 20	59. 34	4820	4802
29	Tu.	16. 17	16. 19	59. 45	59. 53	4789	4779
30	W.	16. 21	16. 21	59. 59	60. 1	4772	4770
31	Th.	16. 21	16. 21	60. 1	59. 58	4770	4773

MARCH 1774.

Diſtances of ☽'s Center from ⊙, and from Stars eaſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Antares.	47. 31. 35	45. 49. 55	44. 8. 19	42. 26. 49
2		34. 1. 39	32. 21. 20	30. 41. 27	29. 2. 12
3		20. 58. 36			
3	α Aquilæ.	71. 19. 0	69. 44. 30	68. 10. 8	66. 36. 0
4		58. 50. 12	57. 18. 14	55. 46. 46	54. 15. 54
5		46. 52. 25			
3	The Sun.	115. 22. 1	113. 43. 44	112. 5. 24	110. 27. 1
4		102. 14. 32	100. 35. 58	98. 57. 23	97. 18. 48
5		89. 5. 37	87. 26. 59	85. 48. 21	84. 9. 43
6		75. 56. 46	74. 18. 14	72. 39. 44	71. 1. 16
7		62. 49. 35	61. 11. 22	59. 33. 13	57. 55. 7
8		49. 45. 46	48. 8. 9	46. 30. 38	44. 53. 12
14	Aldebaran.	47. 40. 20	46. 5. 20	44. 30. 35	42. 56. 7
15		35. 7. 36	33. 34. 38	32. 1. 56	30. 29. 28
16		22. 50. 34	21. 19. 26	19. 48. 29	18. 17. 44
17	Pollux.	55. 21. 29	53. 54. 20	52. 27. 25	51. 0. 45
18		43. 51. 4	42. 25. 53	41. 0. 59	39. 36. 23
19		32. 38. 30			
19	Regulus.	67. 10. 29	65. 41. 55	64. 13. 21	62. 44. 46
20		55. 21. 22	53. 52. 29	52. 23. 31	50. 54. 27
21		43. 27. 16	41. 57. 25	40. 27. 24	38. 57. 13
22		31. 23. 40	29. 52. 21	28. 20. 49	26. 49. 6
23		19. 7. 29			
23	Spica ♍	72. 35. 41	71. 2. 9	69. 28. 19	67. 54. 9
24		59. 58. 38	58. 22. 35	56. 46. 12	55. 9. 30
25		47. 1. 3	45. 22. 23	43. 43. 24	42. 4. 6
26		33. 43. 13	32. 2. 14	30. 21. 2	28. 39. 40
27		20. 11. 13			
27	Antares	66. 3. 35	64. 20. 48	62. 37. 47	60. 54. 32
28		52. 15. 39	50. 31. 29	48. 47. 14	47. 2. 57
29		38. 21. 52	36. 37. 56	34. 54. 16	33. 10. 58
30		24. 42. 44			
30	α Aquilæ.	75. 2. 48	73. 25. 14	71. 47. 50	70. 10. 38
31		62. 9. 10	60. 34. 4	58. 59. 28	57. 25. 26
A. 1		49. 45. 41			

MARCH 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Antares.	40. 45. 23	39. 4. 6	37. 23. 0	35. 42. 12
2		27. 23. 36	25. 45. 51	24. 9. 1	22. 33. 11
3	α Aquilæ.	65. 2. 8	63. 28. 37	61. 55. 25	60. 22. 36
4		52. 45. 41	51. 16. 10	49. 47. 24	48. 19. 28
2	The Sun.		120. 16. 33	118. 38. 26	117. 0. 15
3		108. 48. 35	107. 10. 7	105. 31. 37	103. 53. 5
4		95. 40. 12	94. 1. 34	92. 22. 56	90. 44. 16
5		82. 31. 5	80. 52. 29	79. 13. 53	77. 35. 19
6		69. 22. 50	67. 44. 27	66. 6. 7	64. 27. 50
7		56. 17. 5	54. 39. 8	53. 1. 16	51. 23. 28
8		43. 15. 53	41. 38. 41	40. 1. 38	38. 24. 36
13	Aldebaran.	54. 3. 5	52. 26. 59	50. 51. 10	49. 15. 37
14		41. 21. 54	39. 47. 57	38. 14. 15	36. 40. 48
15		28. 57. 14	27. 25. 14	25. 53. 28	24. 21. 55
16		16. 47. 10			
16	Pollux.	61. 12. 20	59. 44. 18	58. 16. 28	56. 48. 52
17		49. 34. 19	48. 8. 8	46. 42. 11	45. 16. 30
18		38. 12. 6	36. 48. 9	35. 24. 34	34. 1. 21
19	Regulus.	61. 16. 11	59. 47. 33	58. 18. 53	56. 50. 10
20		49. 25. 16	47. 55. 58	46. 26. 32	44. 56. 58
21		37. 26. 52	35. 56. 21	34. 25. 39	32. 54. 45
22		25. 17. 10	23. 45. 2	22. 12. 43	20. 40. 12
23	Spica ♍	66. 19. 41	64. 44. 54	63. 9. 48	61. 34. 23
24		53. 32. 28	51. 55. 6	50. 17. 24	48. 39. 23
25		40. 24. 30	38. 44. 36	37. 4. 24	35. 23. 56
26		26. 58. 9	25. 16. 31	23. 34. 48	21. 53. 1
27	Antares.	59. 11. 5	57. 27. 27	55. 43. 39	53. 59. 43
28		45. 18. 38	43. 34. 19	41. 50. 3	40. 5. 54
29		31. 28. 6	29. 45. 46	28. 4. 2	26. 23. 0
30	α Aquilæ.	68. 33. 41	66. 57. 1	65. 20. 41	63. 44. 43
31		55. 52. 2	54. 19. 18	52. 47. 18	51. 16. 5

MARCH 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Regulus.	52. 52. 47	54. 37. 3	56. 21. 27	58. 5. 58
2		66. 50. 5	68. 35. 12	70. 20. 25	72. 5. 43
3	Spica ♍	27. 37. 28	29. 21. 45	31. 6. 14	32. 50. 55
4		41. 36. 12	43. 21. 30	45. 6. 52	46. 52. 17
5		55. 40. 6	57. 25. 44	59. 11. 23	60. 57. 2
6		69. 45. 17			
6	Antares.	25. 27. 30	27. 5. 47	28. 44. 46	30. 24. 21
7		38. 49. 31	40. 31. 30	42. 13. 39	43. 56. 0
8		52. 29. 7	54. 11. 52	55. 54. 38	57. 37. 23
9		66. 10. 35	67. 53. 1	69. 35. 20	71. 17. 32
10	β Capricorni.	25. 19. 38	27. 2. 31	28. 45. 12	30. 27. 42
11		38. 57. 10			
15	The Sun.			39. 25. 59	40. 51. 2
16		47. 52. 52	49. 16. 37	50. 40. 10	52. 3. 32
17		58. 57. 40	60. 20. 2	61. 42. 16	63. 4. 22
18		69. 53. 10	71. 14. 40	72. 36. 7	73. 57. 31
19		80. 43. 52	82. 5. 8	83. 26. 26	84. 47. 44
20		91. 34. 47	92. 56. 25	94. 18. 8	95. 39. 58
21		102. 31. 2	103. 53. 42	105. 16. 32	106. 39. 33
22		113. 37. 38	115. 1. 55	116. 26. 26	117. 51. 16
20	Aldebaran.	24. 48. 58	26. 18. 0	27. 47. 7	29. 16. 21
21		36. 44. 25	38. 14. 29	39. 44. 44	41. 15. 10
22		48. 50. 17	50. 21. 59	51. 53. 56	53. 26. 9
23		61. 11. 18	62. 45. 10	64. 19. 21	65. 53. 50
24		73. 51. 11			
24	Pollux.	31. 55. 58	33. 25. 52	34. 56. 33	36. 28. 0
25		44. 15. 42	45. 51. 4	47. 26. 59	49. 3. 26
26		57. 13. 4			
26	Regulus.	20. 19. 40	22. 0. 51	23. 42. 27	25. 24. 29
27		34. 0. 26	35. 44. 39	37. 29. 10	39. 14. 0
28		48. 2. 22	49. 48. 47	51. 35. 25	53. 22. 15
29		62. 19. 10	64. 7. 1	65. 55. 0	67. 43. 6
30		76. 44. 45			
30	Spica ♍	23. 32. 36	25. 19. 17	27. 6. 12	28. 53. 19
31		37. 50. 51	39. 38. 32	41. 26. 13	43. 13. 54
A. 1		52. 11. 52			

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Regulus.	59. 50. 35	61. 35. 18	63. 20. 8	65. 5. 4
2		73. 51. 6			
2	Spica ♍	20. 43. 3	22. 26. 12	24. 9. 40	25. 53. 26
3		34. 35. 46	36. 20. 43	38. 5. 47	39. 50. 57
4		48. 37. 46	50. 23. 18	52. 8. 52	53. 54. 28
5		62. 42. 42	64. 28. 21	66. 14. 0	67. 59. 39
6	Antares.	32. 4. 31	33. 45. 10	35. 26. 16	37. 7. 44
7		45. 38. 29	47. 21. 2	49. 3. 40	50. 46. 22
8		59. 20. 7	61. 2. 49	62. 45. 28	64. 28. 3
9		72. 59. 37			
9	β Capricorni.	18. 26. 26	20. 9. 59	21. 53. 22	23. 36. 35
10		32. 10. 0	33. 52. 6	35. 34. 0	37. 15. 41
15	The Sun.	42. 15. 50	43. 40. 25	45. 4. 47	46. 28. 56
16		53. 26. 42	54. 49. 41	56. 12. 30	57. 35. 10
17		64. 26. 20	65. 48. 11	67. 9. 56	68. 31. 36
18		75. 18. 51	76. 40. 8	78. 1. 24	79. 22. 39
19		86. 9. 3	87. 30. 24	88. 51. 47	90. 13. 14
20		97. 1. 54	98. 23. 58	99. 46. 11	101. 8. 32
21		108. 2. 46	109. 26. 10	110. 49. 46	112. 13. 35
22		119. 16. 21			
19	Aldebaran.	18. 53. 40	20. 22. 24	21. 51. 11	23. 20. 2
20		30. 45. 41	32. 15. 9	33. 44. 46	35. 14. 31
21		42. 45. 47	44. 16. 35	45. 47. 36	47. 18. 50
22		54. 58. 37	56. 31. 22	58. 4. 24	59. 37. 42
23		67. 28. 38	69. 3. 46	70. 39. 14	72. 15. 2
24	Pollux.	38. 0. 12	39. 33. 6	41. 6. 40	42. 40. 53
25		50. 40. 24	52. 17. 52	53. 55. 49	55. 34. 13
26	Regulus.	27. 6. 56	28. 49. 46	30. 32. 58	32. 16. 31
27		40. 59. 8	42. 44. 33	44. 30. 14	46. 16. 10
28		55. 9. 18	56. 56. 32	58. 43. 55	60. 31. 28
29		69. 31. 18	71. 19. 35	73. 7. 55	74. 56. 19
30	Spica ♍	30. 40. 36	32. 28. 1	34. 15. 33	36. 3. 10
31		45. 1. 35	46. 49. 13	48. 36. 49	50. 24. 22

Jupiter's Satellites will not be viſible this Month, **Jupiter** being too near the **Sun**.

APRIL 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	F.	*Good-Friday.*
2	Sa.	
3	*Su.*	*Eaſter-Day.* R.Bp.Chich.
4	M.	*Eaſter-Mon.* St.Ambroſe.
5	Tu.	*Eaſter-Tueſday.*
6	W.	
7	Th.	
8	F.	
9	Sa.	
10	*Su.*	*1ſt Sunday after Eaſter,*
11	M.	[*Low-Sunday.*
12	Tu.	
13	W.	Oxf. and Camb. Terms
14	Th.	[begin.
15	F.	
16	Sa.	
17	*Su.*	*2d Sunday after Eaſter.*
18	M.	From Eaſter in 15 days,
19	Tu.	Alphege. [1 ret.
20	W.	Eaſter Term begins.
21	Th.	
22	F.	
23	Sa.	*St. George.*
24	*Su.*	*3d Sunday after Eaſter.*
25	M.	*St. Mark.* From Eaſter in
26	Tu.	[3 weeks, 2 ret.
27	W.	
28	Th.	
29	F.	
30	Sa.	

Phaſes of the Moon.

	D.	H.	M.
Laſt Quarter —	3.	4.	58
New Moon —	10.	12.	19
Firſt Quarter —	18.	15.	14
Full Moon —	25.	21.	34

Other Phenomena.

D.
1. ☌ ♀ ♂ diff.Lat.7°.49′.
4. ☾ β ♑ 10^{h}. 2′.
6. ☾ θ ♒ 13^{h}. 36′.
9. ☾ ♂ 2^{h}. 13′.
13. ♀ Stationary.
☾ γ ♉ 21^{h}. 39′.
☾ 1 ad δ ♉ 23^{h}. 46′.
14. ☾ 2 ad δ ♉ 0^{h}. 17′.
☾ α ♉ Im. 6^{h}. 10′. *
1¾′. N. of ☽'s cent.
Em. 7^{h}. 19′. *4′.N.
19. ☿ ζ ♓ diff. Lat. 6′.
⊙ enters ♉ at 13^{h}.33′.
20. ☾ ξ ♌ 5^{h}. 8′.
☾ o ♌ 10^{h}. 5′.
22. ☾ τ ♌ 12^{h}. 27′.
☾ β ♍ 22^{h}. 22′.
23. ☾ η ♍ 11^{h}. 53′.
24. ☿ Stationary.
☾ θ ♍ 10^{h}. 45′.
25. ☌ ☿ ♂ diff. Lat. 44′.
☾ κ ♍ 13^{h}. 43′.
26. ☾ γ ♎ 23^{h}. 7′.
27. ☾ η ♎ 2^{h}. 43′.
☾ θ ♎ 6^{h}. 44′.
♂ ζ ♓ diff. Lat. 35′.

APRIL 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Afc. in Time.	Sun's Declin. North.	Equat. of Time. Add.	Diff.
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	F.	0. 11. 49. 9	0. 43. 27,7	4. 40. 42	3. 52,4	18,4
2	Sa.	0. 12. 48. 10	0. 47. 5,9	5. 3. 45	3. 34,0	18,1
3	*Su.*	0. 13. 47. 10	0. 50. 44,3	5. 26. 42	3. 15,9	17,9
4	M.	0. 14. 46. 9	0. 54. 22,9	5. 49. 34	2. 58,0	17,8
5	Tu.	0. 15. 45. 6	0. 58. 1,6	6. 12. 21	2. 40,2	17,7
6	W.	0. 16. 44. 1	1. 1. 40,4	6. 35. 1	2. 22,5	17,5
7	Th.	0. 17. 42. 54	1. 5. 19,5	6. 57. 34	2. 5,0	17,1
8	F.	0. 18. 41. 46	1. 8. 58,9	7. 20. 1	1. 47,9	16,9
9	Sa.	0. 19. 40. 36	1. 12. 38,5	7. 42. 20	1. 31,0	16,6
10	*Su.*	0. 20. 39. 23	1. 16. 18,3	8. 4. 31	1. 14,4	16,4
11	M.	0. 21. 38. 9	1. 19. 58,5	8. 26. 34	0. 58,0	16,0
12	Tu.	0. 22. 36. 53	1. 23. 39,0	8. 48. 29	0. 42,0	15,7
13	W.	0. 23. 35. 35	1. 27. 19,7	9. 10. 15	0. 26,3	15,4
14	Th.	0. 24. 34. 15	1. 31. 0,8	9. 31. 52	0. 10,9	15,1
15	F.	0. 25. 32. 53	1. 34. 42,2	9. 53. 19	Sub. 4,2	14,7
16	Sa.	0. 26. 31. 28	1. 38. 24,0	10. 14. 36	0. 18,9	14,5
17	*Su.*	0. 27. 30. 1	1. 42. 6,1	10. 35. 43	0. 33,4	14,1
18	M.	0. 28. 28. 32	1. 45. 48,6	10. 56. 40	0. 47,5	13,6
19	Tu.	0. 29. 27. 1	1. 49. 31,4	11. 17. 26	1. 1,1	13,2
20	W.	1. 0. 25. 28	1. 53. 14,7	11. 38. 1	1. 14,3	12,9
21	Th.	1. 1. 23. 52	1. 56. 58,4	11. 58. 24	1. 27,2	12,5
22	F.	1. 2. 22. 14	2. 0. 42,5	12. 18. 35	1. 39,7	12,0
23	Sa.	1. 3. 20. 34	2. 4. 27,0	12. 38. 34	1. 51,7	11,5
24	*Su.*	1. 4. 18. 52	2. 8. 11,9	12. 58. 21	2. 3,2	11,1
25	M.	1. 5. 17. 8	2. 11. 57,3	13. 17. 55	2. 14,3	10,6
26	Tu.	1. 6. 15. 23	2. 15. 43,3	13. 37. 16	2. 24,9	10,1
27	W.	1. 7. 13. 36	2. 19. 29,8	13. 56. 24	2. 35,0	9,6
28	Th.	1. 8. 11. 47	2. 23. 16,7	14. 15. 17	2. 44,6	9,0
29	F.	1. 9. 9. 56	2. 27. 4,2	14. 33. 57	2. 53,6	8,5
30	Sa.	1. 10. 8. 4	2. 30. 52,2	14. 52. 23	3. 2,1	7,9

Days.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	16. 2,3	1. 4,4	2. 27,6	0. 000230	5. 21. 18
7	16. 0,6	1. 4,5	2. 27,1	0. 000996	5. 20. 59
13	15. 59,0	1. 4,8	2. 26,6	0. 001734	5. 20. 40
19	15. 57,5	1. 5,1	2. 26,1	0. 002430	5. 20. 20
25	15. 55,9	1. 5,5	2. 25,6	0. 003105	5. 20. 1

The Eclipſes of JUPITER's Satellites will not be viſible this Month, JUPITER being too near the Sun.

APRIL. 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſage over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
			MERCURY. Inf. ☌ $11^{d}. 6^{h}$.			
1	5. 12. 52	6. 14 N	0. 26. 29	3. 16 N	13. 17 N	0. 50
7	6. 7. 4	4. 23	0. 24. 42	2. 53	12. 16	0. 22
13	6. 27. 35	2. 12	0. 20. 35	1. 39	9. 35	23. 41
19	7. 15. 47	0. 0	0. 16. 52	0. 0	6. 38	23. 9
25	8. 2. 43	2. 2 S	0. 15. 31	1. 30 S	4. 45	22. 45
			VENUS.			
1	6. 17. 32	2. 51 N	11. 27. 37	6. 59 N	5. 27 N	22. 53
7	6. 27. 11	2. 29	11. 25. 28	5. 43	3. 26	22. 25
13	7. 6. 49	2. 5	11. 24. 47	4. 22	1. 56	22. 4
19	7. 16. 25	1. 37	11. 25. 28	3. 5	1. 2	21. 47
25	7. 25. 59	1. 5	11. 27. 24	1. 53	0. 42	21. 34
			MARS.			
1	11. 16. 7	1. 38 S	11. 26. 52	0. 58 S	2. 7 S	23. 6
7	11. 19. 54	1. 34	0. 1. 32	0. 56	0. 16 S	23. 1
13	11. 23. 40	1. 30	0. 6. 10	0. 54	1. 36 N	22. 56
19	11. 27. 25	1. 26	0. 10. 47	0. 52	3. 28	22. 51
25	0. 1. 9	1. 21	0. 15. 22	0. 49	5. 18	22. 45
			JUPITER. ☌ $11^{d}. 17\frac{1}{4}^{h}$.			
1	0. 21. 22	1. 17 S	0. 19. 46	1. 4 S	6. 45 N	0. 31
7	0. 21. 55	1. 17	0. 21. 12	1. 4	7. 18	0. 13
13	0. 22. 28	1. 17	0. 22. 39	1. 4	7. 50	23. 55
19	0. 23. 1	1. 17	0. 24. 6	1. 4	8. 22	23. 38
25	0. 23. 34	1. 16	0. 25. 32	1. 4	8. 53	23. 22
			SATURN.			
1	5. 23. 28	2. 13 N	5. 21. 20	2. 27 N	5. 42 N	10. 47
7	5. 23. 40	2. 13	5. 20. 55	2. 27	5. 51	10. 24
13	5. 23. 52	2. 13	5. 20. 33	2. 26	6. 0	10. 1
19	5. 24. 4	2. 13	5. 20. 13	2. 26	6. 6	9. 38
25	5. 24. 17	2. 14	5. 19. 56	2. 25	6. 12	9. 14

APRIL 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M.S.
1	F.	8. 12. 27. 1	8. 19. 39. 49	5. 10. 44 N	5.14.55 N
2	Sa.	8. 26. 50. 35	9. 3. 58. 56	5. 14. 2	5. 8.21
3	*Su.*	9. 11. 4. 24	9. 18. 6. 56	4. 57. 59	4.43.11
4	M.	9. 25. 6. 20	10. 2. 2. 21	4. 24. 18	4. 1.38
5	Tu.	10. 8. 55. 7	10. 15. 44. 27	3. 35. 41	3. 6.52
6	W.	10. 22. 30. 21	10. 29. 13. 4	2. 35. 40	2. 2.36
7	Th.	11. 5. 52. 21	11. 12. 28. 29	1. 28. 7	0.52.41 N
8	F.	11. 19. 1. 22	11. 25. 31. 8	0. 17. 1 N	0.18.39 S
9	Sa.	0. 1. 57. 49	0. 8. 21. 26	0. 53. 47 S	1.27.52
10	*Su.*	0. 14. 42. 7	0. 20. 59. 47	2. 0. 36	2.31.36
11	M.	0. 27. 14. 33	1. 3. 26. 34	3. 0. 25	3.26.54
12	Tu.	1. 9. 35. 59	1. 15. 42. 44	3. 50. 46	4.11.47
13	W.	1. 21. 47. 7	1. 27. 49. 22	4. 29. 46	4.44.39
14	Th.	2. 3. 49. 33	2. 9. 48. 13	4. 56. 16	5. 4.37
15	F.	2. 15. 45. 32	2. 21. 41. 52	5. 9. 36	5.11.16
16	Sa.	2. 27. 37. 49	3. 3. 33. 40	5. 9. 35	5. 4.35
17	*Su.*	3. 9. 30. 2	3. 15. 27. 31	4. 56. 19	4.44.49
18	M.	3. 21. 26. 29	3. 27. 27. 43	4. 30. 10	4.12.25
19	Tu.	4. 3. 31. 42	4. 9. 39. 10	3. 51. 46	3.28.14
20	W.	4. 15. 50. 36	4. 22. 6. 37	3. 2. 4	2.33.22
21	Th.	4. 28. 27. 51	5. 4. 54. 38	2. 2. 26	1.29.27
22	F.	5. 11. 27. 27	5. 18. 6. 41	0. 54. 56 S	0.18.57 S
23	Sa.	5. 24. 52. 30	6. 1. 44. 58	0. 17. 46 N	0.54.47 N
24	*Su.*	6. 8. 44. 8	6. 15. 49. 40	1. 31. 34	2. 7.25
25	M.	6. 23. 1. 4	7. 0. 17. 54	2. 41. 45	3.13.49
26	Tu.	7. 7. 39. 16	7. 15. 4. 14	3. 42. 59	4. 8.30
27	W.	7. 22. 31. 46	8. 0. 0. 44	4. 30. 4	4.47. 4
28	Th.	8. 7. 29. 56	8. 14. 58. 17	4. 59. 3	5. 5.56
29	F.	8. 22. 24. 37	8. 29. 48. 7	5. 7. 36	5. 4. 8
30	Sa.	9. 7. 7. 52	9. 14. 23. 18	4. 55. 41	4.42.33

APRIL 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid. H. M.	☽'s Right Aſcen. at Noon. D. M.	☽'s Right Aſc. at Midn. D. M.	☽'s Declinat. at Noon. D. M.	☽'s Declin. at Midn. D. M.
1	F.	22	16. 43	251. 41	259. 12	17. 11 S	17. 50 S
2	Sa.	23	17. 40	266. 42	274. 11	18. 12	18. 16
3	*Su.*	24	18. 38	281. 37	288. 58	18. 3	17. 34
4	M.	25	19. 34	296. 14	303. 22	16. 48	15. 48
5	Tu.	26	20. 27	310. 23	317. 15	14. 35	13. 10
6	W.	27	21. 17	324. 0	330. 37	11. 34	9. 51
7	Th.	28	22. 6	337. 7	343. 31	8. 0	6. 4
8	F.	29	22. 53	349. 48	356. 1	4. 5	2. 4 S
9	Sa.	30	23. 39	2. 10	8. 15	0. 2 S	1. 58 N
10	*Su.*	1	☌	14. 19	20. 20	3. 57 N	5. 52
11	M.	2	0. 26	26. 22	32. 25	7. 42	9. 26
12	Tu.	3	1. 12	38. 26	44. 29	11. 3	12. 32
13	W.	4	1. 58	50. 34	56. 39	13. 53	15. 4
14	Th.	5	2. 45	62. 47	68. 56	16. 5	16. 55
15	F.	6	3. 32	75. 6	81. 18	17. 34	18. 1
16	Sa.	7	4. 19	87. 31	93. 44	18. 17	18. 20
17	*Su.*	8	5. 7	99. 58	106. 12	18. 12	17. 51
18	M.	9	5. 55	112. 26	118. 40	17. 19	16. 34
19	Tu.	10	6. 43	124. 55	131. 9	15. 38	14. 31
20	W.	11	7. 31	137. 23	143. 38	13. 12	11. 44
21	Th.	12	8. 19	149. 55	156. 12	10. 7	8. 20
22	F.	13	9. 8	162. 33	168. 57	6. 26	4. 25
23	Sa.	14	9. 58	175. 25	181. 58	2. 19 N	0. 8 N
24	*Su.*	15	10. 49	188. 38	195. 24	2. 4 S	4. 16 S
25	M.	16	11. 43	202. 18	209. 21	6. 27	8. 34
26	Tu.	17	12. 39	216. 31	223. 51	10. 34	12. 25
27	W.	18	13. 38	231. 18	238. 53	14. 4	15. 30
28	Th.	19	14. 38	246. 33	254. 17	16. 40	17. 33
29	F.	20	15. 39	262. 3	269. 48	18. 8	18. 24
30	Sa.	21	16. 39	277. 29	285. 5	18. 21	18. 0

APRIL 1774.

Days of the Month.	Days of the Week.	Semidr. ☽ at Noon.	Semidr. ☽ at Midnight.	Hor. Par. ☽ at Noon.	Hor. Par. ☽ at Midnight.	Proport. Logar. at Noon.	Proport. Logar. at Midn.
		M. S.	M. S.	M. S.	M. S.		
1	F.	16. 19	16. 17	59. 53	59. 47	4779	4787
2	Sa.	16. 15	16. 12	59. 38	59. 29	4798	4809
3	*Su.*	16. 9	16. 6	59. 17	59. 5	4823	4838
4	M.	16. 3	15. 59	58. 53	58. 39	4853	4870
5	Tu.	15. 55	15. 51	58. 26	58. 12	4886	4903
6	W.	15. 48	15. 44	57. 57	57. 43	4922	4940
7	Th.	15. 40	15. 36	57. 28	57. 13	4958	4977
8	F.	15. 31	15. 27	56. 58	56. 43	4996	5015
9	Sa.	15. 23	15. 19	56. 28	56. 13	5035	5054
10	*Su.*	15. 15	15. 11	55. 58	55. 44	5073	5091
11	M.	15. 7	15. 4	55. 30	55. 17	5110	5127
12	Tu.	15. 0	14. 57	55. 4	54. 53	5144	5158
13	W.	14. 55	14. 52	54. 43	54. 34	5171	5183
14	Th.	14. 50	14. 49	54. 26	54. 21	5194	5201
15	F.	14. 48	14. 47	54. 17	54. 16	5206	5207
16	Sa.	14. 47	14. 48	54. 17	54. 19	5206	5203
17	*Su.*	14. 50	14. 52	54. 25	54. 33	5195	5185
18	M.	14. 55	14. 58	54. 43	54. 56	5171	5154
19	Tu.	15. 2	15. 7	55. 11	55. 30	5134	5110
20	W.	15. 13	15. 19	55. 50	56. 12	5084	5055
21	Th.	15. 25	15. 32	56. 36	57. 1	5025	4992
22	F.	15. 40	15. 47	57. 28	57. 55	4958	4924
23	Sa.	15. 54	16. 1	58. 22	58. 49	4891	4858
24	*Su.*	16. 8	16. 15	59. 14	59. 38	4827	4798
25	M.	16. 21	16. 25	59. 59	60. 17	4772	4751
26	Tu.	16. 29	16. 32	60. 31	60. 42	4734	4721
27	W.	16. 34	16. 35	60. 49	60. 51	4712	4710
28	Th.	16. 35	16. 33	60. 50	60. 45	4711	4717
29	F.	16. 31	16. 28	60. 36	60. 24	4728	4742
30	Sa.	16. 24	16. 19	60. 10	59. 53	4759	4779

APRIL 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	β Capricorni.	48. 15. 27	46. 27. 31	44. 39. 42	42. 52. 1
2		33. 55. 32	32. 8. 39	30. 21. 56	28. 35. 22
3		19. 45. 8	17. 59. 37	16. 14. 16	14. 29. 6
1	The Sun.	119. 14. 14	117. 33. 42	115. 53. 17	114. 12. 59
2		105. 53. 29	104. 14. 0	102. 34. 40	100. 55. 29
3		92. 42. 9	91. 3. 59	89. 26. 0	87. 48. 11
4		79. 41. 40	78. 4. 55	76. 28. 22	74. 51. 59
5		66. 52. 52	65. 17. 37	63. 42. 33	62. 7. 41
6		54. 16. 14	52. 42. 29	51. 8. 55	49. 35. 32
7		41. 51. 48	40. 19. 39	38. 47. 43	
12	Pollux.	71. 9. 34	69. 39. 42	68. 10. 2	66. 40. 35
13		59. 16. 30	57. 48. 20	56. 20. 23	54. 52. 40
14		47. 37. 45	46. 11. 30	44. 45. 30	43. 19. 46
15		36. 15. 52			
15	Regulus.	71. 3. 40	69. 35. 1	68. 6. 24	66. 37. 48
16		59. 15. 13	57. 46. 45	56. 18. 17	54. 49. 48
17		47. 26. 49	45. 58. 2	44. 29. 11	43. 0. 14
18		35. 34. 4	34. 4. 27	32. 34. 42	31. 4. 49
19		23. 33. 2			
19	Spica ♍	77. 4. 3	75. 32. 52	74. 1. 27	72. 29. 46
20		64. 47. 27	63. 14. 8	61. 40. 31	60. 6. 35
21		52. 11. 56	50. 36. 0	48. 59. 43	47. 23. 5
22		39. 14. 34	37. 35. 49	35. 56. 42	34. 17. 14
23		25. 55. 26			
23	Antares.	71. 49. 34	70. 8. 17	68. 26. 36	66. 44. 32
24		58. 8. 57	56. 24. 52	54. 40. 30	52. 55. 53
25		44. 9. 39	42. 23. 57	40. 38. 8	38. 52. 21
26		30. 5. 28			
26	α Aquilæ.	80. 16. 50	78. 36. 51	76. 56. 50	75. 16. 50
27		66. 58. 22	65. 19. 17	63. 40. 33	62. 2. 14
28		53. 58. 25			
28	β Capricorni.	53. 11. 47	51. 19. 57	49. 28. 14	47. 36. 38
29		38. 20. 41	36. 29. 59	34. 39. 28	32. 49. 9
30	α Pegaſi.	72. 32. 29	70. 50. 21	69. 8. 37	67. 27. 19
M.1		59. 7. 47			
30	The Sun.		121. 10. 39	119. 29. 34	117. 48. 43
M.1		109. 28. 38			

APRIL 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	β Capricorni.	41. 4. 27	39. 17. 1	37. 29. 43	35. 42. 33
2		26. 48. 58	25. 2. 45	23. 16. 42	21. 30. 50
3		12. 44. 6			
1	The Sun.	112. 32. 49	110. 52. 47	109. 12. 53	107. 33. 7
2		99. 16. 28	97. 37. 38	95. 58. 58	94. 20. 28
3		86. 10. 32	84. 33. 3	82. 55. 44	81. 18. 36
4		73. 15. 48	71. 39. 47	70. 3. 58	68. 28. 19
5		60. 33. 0	58. 58. 32	57. 24. 15	55. 50. 9
6		48. 2. 22	46. 29. 25	44. 56. 41	43. 24. 9
12	Pollux.	65. 11. 20	63. 42. 18	62. 13. 29	60. 44. 53
13		53. 25. 11	51. 57. 57	50. 30. 58	49. 4. 14
14		41. 54. 20	40. 29. 12	39. 4. 25	37. 39. 58
15	Regulus.	65. 9. 14	63. 40. 43	62. 12. 13	60. 43. 43
16		53. 21. 17	51. 52. 44	50. 24. 9	48. 55. 31
17		41. 31. 12	40. 2. 5	38. 32. 52	37. 3. 32
18		29. 34. 46	28. 4. 34	26. 34. 13	25. 3. 42
19	Spica ♍	70. 57. 51	69. 25. 40	67. 53. 12	66. 20. 28
20		58. 32. 20	56. 57. 44	55. 22. 48	53. 47. 32
21		45. 46. 6	44. 8. 45	42. 31. 2	40. 52. 58
22		32. 37. 28	30. 57. 24	29. 17. 2	27. 36. 23
23	Antares.	65. 2. 6	63. 19. 19	61. 36. 11	59. 52. 44
24		51. 11. 1	49. 25. 56	47. 40. 39	45. 55. 12
25		37. 6. 38	35. 21. 1	33. 35. 35	31. 50. 23
26	α Aquilæ.	73. 36. 52	71. 56. 59	70. 17. 15	68. 37. 43
27		60. 24. 19	58. 46. 56	57. 10. 7	55. 33 56
28	β Capricorni.	45. 45. 9	43. 53. 48	42. 2. 36	40. 11. 34
29		30. 59. 1			
29	α Pegaſi.	79. 24. 29	77. 41. 1	75. 57. 50	74. 14. 59
30		65. 46. 26	64. 6. 1	62. 26. 6	60. 46. 41
30	The Sun.	116. 8. 5	114. 27. 48	112. 47. 47	111. 8. 4

APRIL 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Spica ♍	52. 11. 52	53. 59. 17	55. 46. 35	57. 33. 47
2		66. 28. 9			
2	Antares.	22. 26. 31	24. 3. 38	25. 41. 37	27. 20. 22
3		35. 42. 23	37. 23. 44	39. 5. 12	40. 46. 49
4		49. 15. 32	50. 57. 12	52. 38. 47	54. 20. 19
5		62. 46. 36	64. 27. 30	66. 8. 16	67. 48. 53
6		76. 9. 42			
6	β Capricorni.	21. 39. 45	23. 20. 57	25. 1. 58	26. 42. 47
7		35. 3. 55	36. 43. 36	38. 23. 6	40. 2. 24
8		48. 15. 57	49. 54. 5	51. 32. 1	53. 9. 46
9		61. 15. 33			
14	The Sun.	39. 30. 53	40. 52. 52	42. 14. 45	43. 36. 32
15		50. 24. 14	51. 45. 34	53. 6. 51	54. 28. 6
16		61. 14. 2	62. 35. 12	63. 56. 22	65. 17. 34
17		72. 4. 10	73. 25. 42	74. 47. 19	76. 9. 2
18		82. 59. 15	84. 21. 43	85. 44. 22	87. 7. 11
19		94. 4. 8	95. 28. 11	96. 52. 29	98. 17. 2
20		105. 23. 48	106. 50. 2	108. 16. 34	109. 43. 25
21		117. 2. 52	118. 31. 48	120. 1. 6	
19	Aldebaran.	56. 42. 46	58. 14. 15	59. 45. 59	61. 17. 58
20		69. 1. 57	70. 35. 37	72. 9. 37	73. 43. 56
21	Pollux.	39. 16. 4	40. 47. 59	42. 20. 32	43. 53. 42
22		51. 48. 11	53. 24. 44	55. 1. 50	56. 39. 27
23	Regulus.	28. 10. 45	29. 53. 12	31. 36. 6	33. 19. 27
24		42. 2. 47	43. 48. 42	45. 35. 0	47. 21. 41
25		56. 20. 23	58. 9. 9	59. 58. 13	61. 47. 35
26		70. 58. 11			
26	Spica ♍	17. 53. 48	19. 41. 25	21. 29. 38	23. 18. 24
27		32. 28. 15	34. 19. 0	36. 9. 52	38. 0. 52
28		47. 16. 42	49. 7. 52	50. 58. 59	52. 50. 3
29		62. 3. 37	63. 53. 51	65. 44. 1	67. 33. 57
30	Antares.	31. 54. 53	33. 38. 32	35. 22. 26	37. 6. 31
M. 1		45. 47. 9			

APRIL 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	12 Hours. D. M. S.	15 Hours. D. M. S.	18 Hours. D. M. S.	21 Hours. D. M. S.
1	Spica ♍	59. 20. 54	61. 7. 54	62. 54. 47	64. 41. 32
2	Antares.	28. 59. 47	30. 39. 49	32. 20. 17	34. 1. 11
3		42. 28. 33	44. 10. 16	45. 52. 2	47. 33. 48
4		56. 1. 46	57. 43. 8	59. 24. 24	61. 5. 33
5		69. 29. 22	71. 9. 42	72. 49. 52	74. 29. 52
6	β Capricorni.	28. 23. 24	30. 3. 49	31. 44. 2	33. 24. 4
7		41. 41. 31	43. 20. 25	44. 59. 7	46. 37. 38
8		54. 47. 19	56. 24. 40	58. 1. 49	59. 38. 47
14	The Sun.	44. 58. 14	46. 19. 51	47. 41. 23	49. 2. 51
15		55. 49. 18	57. 10. 30	58. 31. 41	59. 52. 52
16		66. 38. 47	68. 0. 3	69. 21. 21	70. 42. 43
17		77. 30. 51	78. 52. 45	80. 14. 47	81. 36. 57
18		88. 30. 11	89. 53. 22	91. 16. 44	92. 40. 19
19		99. 41. 50	101. 6. 54	102. 32. 15	103. 57. 53
20		111. 10. 37	112. 38. 10	114. 6. 3	115. 34. 17
18	Aldebaran.	50. 39. 7	52. 9. 42	53. 40. 30	55. 11. 31
19		62. 50. 13	64. 22. 43	65. 55. 30	67. 28. 35
20		75. 18. 36			
20	Pollux.	33. 15. 17	34. 44. 25	36. 14. 16	37. 44. 49
21		45. 27. 27	47. 1. 47	48. 36. 42	50. 12. 10
22		58. 17. 33			
22	Regulus.	21. 25. 45	23. 6. 16	24. 47. 17	26. 28. 47
23		35. 3. 15	36. 47. 30	38. 32. 11	40. 17. 17
24		49. 8. 44	50. 56. 8	52. 43. 53	54. 31. 58
25		63. 37. 13	65. 27. 7	67. 17. 15	69. 7. 37
26	Spica ♍	25. 7. 38	26. 57. 18	28. 47. 19	30. 37. 39
27		39. 51. 58	41. 43. 7	43. 34. 18	45. 25. 30
28		54. 41. 1	56. 31. 51	58. 22. 35	60. 13. 11
29		69. 23. 42			
29	Antares.	25. 4. 15	26. 46. 10	28. 28. 38	30. 11. 34
30		38. 50. 45	40. 34. 57	42. 19. 3	44. 3. 9

Jupiter's Satellites will not be viſible this Month,
Jupiter being too near the Sun.

MAY 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
		———[& *St. James.*
1	*Su.*	*4th Su. after Eaſt. St. Phil.*
2	M.	From Eaſt. in 1 mon. 3 r.
3	Tu.	Invention of the Croſs.
4	W.	
5	Th.	
6	F.	John Evan. ante P. Lat.
7	Sa.	
8	*Su.*	*5th Su. after Eaſt. Rogat.*
9	M.	From Eaſt. in 5 weeks.
10	Tu.	[4 ret.
11	W.	
12	Th.	*Aſcenſion-day. Holy Th.*
13	F.	Morrow of Aſc. 5 ret.
14	Sa.	
15	*Su.*	*Sunday after Aſcenſion-day.*
16	M.	Term ends.
17	Tu.	
18	W.	
19	Th.	*Q. Charlotte born,* 1744.
20	F.	[Dunſt. Oxf. T. ends.
21	Sa.	
22	*Su.*	*Whit-Sunday.*
23	M.	*Whit-Monday.* Cam. Ter.
24	Tu.	*Whit-Tueſ.* [divides mid.
25	W.	
26	Th.	Auguſtin, 1ſt Abp. Cant.
27	F.	Ven. Bede.
28	Sa.	
29	*Su.*	*Trinity-Su.* K. *Ch.* II. *reſt.*
30	M.	On mor. of H. Tr. 1 ret.
31	Tu.	

Phaſes of the Moon.

	D.	H.	M.
Laſt Quarter—	2.	11.	58
New Moon —	10.	3.	16
Firſt Quarter—	18.	6.	58
Full Moon —	25.	5.	22
Laſt Quarter —	31.	20.	23

D.	Other Phenomena.
1.	☾ β ♑ 15^{h}. 50′.
3.	☾ θ ♒ 19^{h}. 8′.
7.	☾ ☿ Im. 19^{h}. 38′. Em. 20^{h}. 13′. ☿ paſſes 13′ N. of ☽'s cent.
11.	☾ γ ♉ 4^{h}. 38′.
	☾ 1 ad δ ♉ 6^{h}. 46′.
	☾ 2 ad δ ♉ 7^{h}. 17′.
	☾ α ♉ 12^{h}. 38′.
17.	☾ ξ ♌ 12^{h}. 59′.
	☾ ο ♌ 18^{h}. 3′.
19.	☾ τ ♌ 21^{h}. 38′.
20.	☾ β ♍ 7^{h}. 49′.
	☉ enters ♊ at 14^{h}. 12′.
	☾ η ♍ 21^{h}. 39′.
	♄ Stationary.
21.	☾ θ ♍ 20^{h}. 59′.
23.	☾ κ ♍ 0^{h}. 17′.
24.	☾ γ ♎ 9^{h}. 39′.
	☾ η ♎ 13^{h}. 13′.
	☾ θ ♎ 16^{h}. 11′.
25.	☾ φ Serpentar. 7^{h}. 4′.
28.	☾ β ♑ 23^{h}. 22′.
31.	☾ θ ♒ 1^{h}. 17′.

MAY 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Afc. in Time.	Sun's Declin. North.	Equat. of Time Sub.	Diff.
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	*Su.*	1. 11. 6. 11	2. 34. 40,9	15. 10. 34	3. 10,0	
2	M.	1. 12. 4. 16	2. 38. 30,0	15. 28. 30	3. 17,4	7,4
3	Tu.	1. 13. 2. 20	2. 42. 19,7	15. 46. 11	3. 24,2	6,8
4	W.	1. 14. 0. 23	2. 46. 10,0	16. 3. 37	3. 30,4	6,2
5	Th.	1. 14. 58. 25	2. 50. 0,9	16. 20. 47	3. 36,1	5,7
6	F.	1. 15. 56. 25	2. 53. 52,4	16. 37. 41	3. 41,2	5,1
7	Sa.	1. 16. 54. 24	2. 57. 44,4	16. 54. 18	3. 45,7	4,5
8	*Su.*	1. 17. 52. 22	3. 1. 37,1	17. 10. 39	3. 49,5	3,8
9	M.	1. 18. 50. 18	3. 5. 30,3	17. 26. 42	3. 52,8	3,3
10	Tu.	1. 19. 48. 13	3. 9. 24,2	17. 42. 28	3. 55,6	2,8
11	W.	1. 20. 46. 6	3. 13. 18,6	17. 57. 57	3. 57,7	2,1
12	Th.	1. 21. 43. 58	3. 17. 13,6	18. 13. 7	3. 59,3	1,6
13	F.	1. 22. 41. 48	3. 21. 9,1	18. 27. 59	4. 0,3	1,0
14	Sa.	1. 23. 39. 37	3. 25. 5,2	18. 42. 32	4. 0,7	0,4
15	*Su.*	1. 24. 37. 24	3. 29. 1,9	18. 56. 47	4. 0,6	0,1
16	M.	1, 25. 35. 9	3. 32. 59,1	19. 10. 42	3. 59,9	0,7
17	Tu.	1. 26. 32. 53	3. 36. 56,8	19. 24. 17	3. 58,7	1,2
18	W.	1. 27. 30. 35	3. 40. 55,2	19. 37. 33	3. 57,0	1,7
19	Th.	1. 28. 28. 16	3. 44. 54,0	19. 50. 29	3. 54,7	2,3
20	F.	1. 29. 25. 54	3. 48. 53,4	20. 3. 5	3. 51,9	2,8
21	Sa.	2. 0. 23. 31	3. 52. 53,3	20. 15. 20	3. 48,6	3,3
22	*Su.*	2. 1. 21. 7	3. 56. 53,7	20. 27. 15	3. 44,7	3,9
23	M.	2. 2. 18. 42	4. 0. 54,7	20. 38. 48	3. 40,3	4,4
24	Tu.	2. 3. 16. 15	4. 4. 56,1	20. 50. 1	3. 35,4	4,9
25	W.	2. 4. 13. 47	4. 8. 58,0	21. 0. 52	3. 30,1	5,3
26	Th.	2. 5. 11. 17	4. 13. 0,5	21. 11. 21	3. 24,2	5,9
27	F.	2. 6. 8. 47	4. 17. 3,4	21. 21. 28	3. 17,8	6,4
28	Sa.	2. 7. 6. 16	4. 21. 6,9	21. 31. 13	3. 11,0	6,8
29	*Su.*	2. 8. 3. 44	4. 25. 10,8	21. 40. 36	3. 3,6	7,4
30	M.	2. 9. 1. 11	4. 29. 15,1	21. 49. 37	2. 55,8	7,8
31	Tu.	2. 9. 58. 38	4. 33. 20,0	21. 58. 15	2. 47,6	8,2

MAY 1774.

Days of the Month.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	15. 54,5	1. 5,9	2. 25,3	0. 003766	5. 19. 42
7	15. 53,2	1. 6,4	2. 24,9	0. 004395	5. 19. 23
13	15. 52,0	1. 6,9	2. 24,6	0. 004961	5. 19. 4
19	15. 50,8	1. 7,4	2. 24,2	0. 005453	5. 18. 45
25	15. 49,8	1. 7,8	2. 23,9	0. 005895	5. 18. 26

Eclipſes of the SATELLITES of JUPITER.

I. Satellite. Immerſions.	
Days	H. M. S.
16	20. 7. 3
18	14. 35. 41
20	9. 4. 12
22	3. 32. 47
23	22. 1. 16
25	16. 29. 47
27	10. 58. 12
29	5. 26. 38
30	23. 54. 57

II. Satellite. Immerſions.	
Days	H. M. S.
18	0. 10. 36
21	13. 28. 7
25	2. 45. 33
28	16. 2. 55

III. Satellite.		
Days	H. M. S.	
15	1. 12. 17	I
15	3. 2. 3	E
22	5. 13. 36	I
22	7. 2. 16	E
29	9. 14. 25	I
29	11. 1. 58	E

IV. Satellite.		Conj.
20	16.39.11	Inf.
29	1.45.51	Sup.

MAY 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſage over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
MERCURY. Gr. Elong. 9^d.						
1	8. 19. 12	3. 51 S	0. 17. 2	2. 33 S	4. 21 N	22. 31
7	9. 5. 59	5. 23	0. 21. 5	3. 6	5. 22	22. 25
13	9. 23. 52	6. 29	0. 27. 9	3. 12	7. 29	22. 25
19	10. 13. 45	6. 59	1. 4. 53	2. 54	10. 26	22. 31
25	11. 6. 45	6. 32	1. 14. 6	2. 16	13. 55	22. 43
VENUS.						
1	8. 5. 31	0. 32 N	0. 0. 20	0. 50 N	0. 54 N	21. 24
7	8. 15. 3	0. 2 S	0. 4. 5	0. 2 S	1. 36	21. 16
13	8. 24. 33	0. 35	0. 8. 27	0. 46	2. 39	21. 10
19	9. 4. 3	1. 8	0. 13. 19	1. 22	4. 0	21. 6
25	9. 13. 32	1. 38	0. 18. 35	1. 51	5. 35	21. 2
MARS.						
1	0. 4. 52	1. 16 S	0. 19. 56	0. 47 S	7. 6 N	22. 39
7	0. 8. 34	1. 11	0. 24. 29	0. 44	8. 49	22. 33
13	0. 12. 14	1. 5	0. 28. 59	0. 40	10. 30	22. 27
19	0. 15. 52	0. 59	1. 3. 28	0. 37	12. 6	22. 20
25	0. 19. 29	0. 53	1. 7. 55	0. 34	13. 38	22. 13
JUPITER.						
1	0. 24. 7	1. 16 S	0. 26. 58	1. 4 S	9. 24 N	23. 4
7	0. 24. 39	1. 16	0. 28. 22	1. 4	9. 55	22. 46
13	0. 25. 12	1. 16	0. 29. 46	1. 4	10. 24	22. 28
19	0. 25. 45	1. 16	1. 1. 8	1. 4	10. 53	22. 9
25	0. 26. 18	1. 15	1. 2. 29	1. 5	11. 20	21. 50
SATURN.						
1	5. 24. 29	2. 14 N	5. 19. 42	2. 24 N	6. 17 N	8. 50
7	5. 24. 41	2. 14	5. 19. 31	2. 23	6. 21	8. 26
13	5. 24. 53	2. 14	5. 19. 24	2. 22	6. 23	8. 2
19	5. 25. 6	2. 15	5. 19. 21	2. 21	6. 23	7. 39
25	5. 25. 18	2. 15	5. 19. 22	2. 20	6. 22	7. 15

MAY 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M.S.
1	*Su.*	9. 21. 33. 55	9. 28. 39. 23	4. 25. 6 N	4. 3.45 N
2	M.	10. 5. 39. 39	10. 12. 34. 32	3. 38. 58	3.11.18
3	Tu.	10. 19. 24. 20	10. 26. 9. 0	2. 41. 12	2. 9.13
4	W.	11. 2. 48. 52	11. 9. 24. 15	1. 35. 51	1. 1.37 N
5	Th.	11. 15. 55. 20	11. 22. 22. 29	0. 26. 56 N	0. 7.43 S
6	F.	11. 28. 46. 6	0. 5. 6. 27	0. 41. 54 S	1.15.13
7	Sa.	0. 11. 23. 43	0. 17. 38. 17	1. 47. 22	2.17.52
8	*Su.*	0. 23. 50. 21	1. 0. 0. 4	2. 46. 34	3.13. 1
9	M.	1. 6. 7. 44	1. 12. 13. 23	3. 37. 5	3.58.27
10	Tu.	1. 18. 17. 17	1. 24. 19. 28	4. 17. 2	4.32.36
11	W.	2. 0. 20. 9	2. 6. 19. 30	4. 45. 1	4.54.14
12	Th.	2. 12. 17. 36	2. 18. 14. 41	5. 0. 13	5. 2.52
13	F.	2. 24. 11. 2	3. 0. 6. 51	5. 2. 14	4.58.22
14	Sa.	3. 6. 2. 24	3. 11. 58. 5	4. 51. 14	4.41. 0
15	*Su.*	3. 17. 54. 19	3. 23. 51. 30	4. 27. 40	4.11.25
16	M.	3. 29. 50. 4	4. 5. 50. 34	3. 52. 18	3.30.30
17	Tu.	4. 11. 53. 44	4. 17. 59. 56	3. 6. 13	2.39.35
18	W.	4. 24. 9. 49	5. 0. 24. 5	2. 10. 47	1.40. 6
19	Th.	5. 6. 43. 14	5. 13. 7. 58	1. 7. 48 S	0.34. 9 S
20	F.	5. 19. 38. 40	5. 26. 16. 3	0. 0. 25 N	0.35.33 N
21	Sa.	6. 3. 0. 18	6. 9. 51. 52	1. 10. 48	1.45.34
22	*Su.*	6. 16. 50. 48	6. 23. 57. 6	2. 19. 25	2.51.40
23	M.	7. 1. 10. 27	7. 8. 30. 31	3. 21. 38	3.48.48
24	Tu.	7. 15. 56. 30	7. 23. 27. 27	4. 12. 19	4.31.46
25	W.	8. 1. 2. 14	8. 8. 39. 35	4. 46. 35	4.56.23
26	Th.	8. 16. 18. 0	8. 23. 56. 4	5. 0. 56	5. 0. 7
27	F.	9. 1. 32. 25	9. 9. 5. 41	4. 53. 57	4.42.40
28	Sa.	9. 16. 34. 41	9. 23. 58. 37	4. 26. 36	4. 6.13
29	*Su.*	10. 1. 16. 38	10. 8. 28. 18	3. 42. 2	3.14.40
30	M.	10. 15. 33. 17	10. 22. 31. 33	2. 44. 36	2.12.20
31	Tu.	10. 29. 23. 12	11. 6. 8. 25	1. 39. 1	1. 4.38

MAY 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſs-age over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſcen. at Midn.	☽'s Declinat. at Noon.	☽'s Declinat. at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	*Su.*	22	17. 35	292. 35	299. 55	17. 22 S	16. 28 S
2	M.	23	18. 30	307. 6	314. 7	15. 20	13. 59
3	Tu.	24	19. 21	320. 58	327. 39	12. 28	10. 47
4	W.	25	20. 10	334. 11	340. 35	8. 59	7. 6
5	Th.	26	20. 57	346. 52	353. 3	5. 9	3. 9 S
6	F.	27	21. 43	359. 9	5. 11	1. 8 S	0. 53 N
7	Sa.	28	22. 28	11. 11	17. 8	2. 52 N	4. 48
8	*Su.*	29	23. 13	23. 6	29. 3	6. 41	8. 28
9	M.	30	23. 59	35. 1	41. 1	10. 10	11. 44
10	Tu.	1	☌	47. 3	53. 6	13. 10	14. 28
11	W.	2	0. 45	59. 12	65. 20	15. 36	16. 33
12	Th.	3	1. 32	71. 30	77. 41	17. 20	17. 55
13	F.	4	2. 19	83. 54	90. 7	18. 18	18. 30
14	Sa.	5	3. 6	96. 21	102. 34	18. 29	18. 16
15	*Su.*	6	3. 53	108. 47	114. 59	17. 51	17. 14
16	M.	7	4. 40	121. 10	127. 19	16. 25	15. 26
17	Tu.	8	5. 27	133. 28	139. 36	14. 16	12. 55
18	W.	9	6. 14	145. 44	151. 52	11. 25	9. 47
19	Th.	10	7. 1	158. 2	164. 14	8. 0	6. 7
20	F.	11	7. 48	170. 29	176. 49	4. 7 N	2. 2 N
21	Sa.	12	8. 38	183. 14	189. 46	0. 7 S	2. 18 S
22	*Su.*	13	9. 29	196. 25	203. 14	4. 29	6. 39
23	M.	14	10. 23	210. 13	217. 23	8. 45	10. 45
24	Tu.	15	11. 21	224. 43	232. 14	12. 36	14. 16
25	W.	16	12. 21	239. 55	247. 44	15. 43	16. 53
26	Th.	17	13. 23	255. 39	263. 38	17. 46	18. 20
27	F.	18	14. 25	271. 37	279. 34	18. 34	18. 27
28	Sa.	19	15. 25	287. 24	295. 7	18. 2	17. 18
29	*Su.*	20	16. 22	302. 40	310. 2	16. 17	15. 2
30	M.	21	17. 16	317. 11	324. 9	13. 34	11. 56
31	Tu.	22	18. 7	330. 55	337. 31	10. 9	8. 16

MAY 1774.

Days of the Month.	Days of the Week.	Semid^{r}. ☽ at Noon. M. S.	Semid^{r}. ☽ at Midnight. M. S.	Hor. Par. ☽ at Noon. M. S.	Hor. Par. ☽ at Midnight. M. S.	Proport. Logar. at Noon.	Proport. Logar. at Mid.
1	*Su.*	16. 14	16. 9	59. 35	59. 15	4801	4826
2	M.	16. 3	15. 58	58. 55	58. 34	4850	4876
3	Tu.	15. 52	15. 46	58. 13	57. 52	4902	4928
4	W.	15. 41	15. 35	57. 33	57. 13	4952	4977
5	Th.	15. 31	15. 26	56. 55	56. 36	5000	5025
6	F.	15. 21	15. 16	56. 20	56. 3	5045	5067
7	Sa.	15. 12	15. 8	55. 48	55. 34	5086	5104
8	*Su.*	15. 5	15. 1	55. 21	55. 8	5122	5138
9	M.	14. 58	14. 55	54. 57	54. 46	5153	5167
10	Tu.	14. 53	14. 51	54. 37	54. 29	5179	5190
11	W.	14. 49	14. 47	54. 22	54. 16	5199	5207
12	Th.	14. 46	14. 45	54. 11	54. 8	5214	5218
13	F.	14. 45	14. 45	54. 7	54. 7	5219	5219
14	Sa.	14. 45	14. 46	54. 9	54. 12	5217	5213
15	*Su.*	14. 48	14. 50	54. 18	54. 27	5205	5193
16	M.	14. 53	14. 56	54. 37	54. 50	5179	5162
17	Tu.	15. 1	15. 5	55. 5	55. 22	5142	5120
18	W.	15. 11	15. 16	55. 42	56. 4	5094	5065
19	Th.	15. 23	15. 30	56. 28	56. 54	5035	5002
20	F.	15. 38	15. 46	57. 21	57. 50	4967	4931
21	Sa.	15. 53	16. 1	58. 18	58. 48	4896	4859
22	*Su.*	16. 9	16. 17	59. 16	59. 44	4824	4790
23	M.	16. 23	16. 29	60. 9	60. 32	4760	4733
24	Tu.	16. 35	16. 39	60. 51	61. 6	4710	4692
25	W.	16. 42	16. 44	61. 17	61. 24	4679	4671
26	Th.	16. 44	16. 43	61. 25	61. 22	4670	4673
27	F.	16. 41	16. 37	61. 13	61. 1	4684	4698
28	Sa.	16. 33	16. 28	60. 45	60. 25	4717	4741
29	*Su.*	16. 22	16. 15	60. 3	59. 39	4768	4797
30	M.	16. 8	16. 1	59. 14	58. 47	4827	4860
31	Tu,	15. 54	15. 47	58. 21	57. 55	4892	4924

MAY 1774.

Diſtances of ☽'s Center from Stars, and from ☉ eaſt of her.

Days.	Stars Names.	Noon. D. M. S.	3 Hours. D. M. S.	6 Hours. D. M. S.	9 Hours. D. M. S.
1	α Pegaſi.	59. 7. 48	57. 29. 28	55. 51. 47	54. 14. 44
2		46. 20. 7	44. 47. 44	43. 16. 18	41. 45. 54
1	The Sun.	109. 28. 38	107. 49. 29	106. 10. 39	104. 32. 7
2		96. 23. 51	94. 47. 7	93. 10. 42	91. 34. 35
3		83. 38. 25	82. 4. 6	80. 30. 5	78. 56. 21
4		71. 11. 58	69. 39. 55	68. 8. 9	66. 36. 39
5		59. 3. 9	57. 33. 14	56. 3. 34	54. 34. 8
6		47. 10. 33	45. 42. 32	44. 14. 45	42. 47. 12
12	Regulus.	74. 30. 13	73. 1. 18	71. 32. 26	70. 3. 37
13		62. 40. 17	61. 11. 44	59. 43. 12	58. 14. 42
14		50. 52. 25	49. 23. 57	47. 55. 28	46. 26. 57
15		39. 3. 46	37. 34. 58	36. 6. 6	34. 37. 10
16		27. 11. 15	25. 41. 47	24. 12. 13	22. 42. 33
17		15. 12. 51			
17	Spica ♍	68. 43. 53	67. 12. 54	65. 41. 43	64. 10. 17
18		56. 29. 37	54. 56. 41	53. 23. 29	51. 49. 59
19		43. 58. 9	42. 22. 50	40. 47. 12	39. 11. 15
20		31. 6. 53	29. 29. 4	27. 51. 0	26. 12. 39
21		17. 58. 51			
21	Antares.	63. 48. 46	62. 8. 0	60. 26. 50	58. 45. 16
22		50. 12. 12	48. 28. 34	46. 44. 41	45. 0. 34
23		36. 17. 5	34. 32. 11	32. 47. 21	31. 2. 37
24	α Aquilæ.	72. 49. 46	71. 9. 39	69. 29. 34	67. 49. 34
25		59. 32. 23	57. 53. 57	56. 16. 2	54. 38. 41
26		46. 44. 14			
26	β Capricorni.	44. 26. 8	42. 32. 0	40. 37. 54	38. 43. 52
27		29. 15. 26	27. 22. 13	25. 29. 13	23. 36. 27
28		14. 16. 39			
28	α Pegaſi.	63. 48. 19	62. 5. 10	60. 22. 33	58. 40. 31
29		50. 20. 56	48. 43. 25	47. 6. 50	45. 31. 14
30		37. 51. 5	36. 23. 20	34. 57. 18	33. 33. 9
31	α Arietis.	65. 12. 49	63. 34. 7	61. 55, 54	60. 18. 10
J. 1		52. 16. 57			
30	The Sun.	113. 26. 11	111. 48. 27	110. 11. 7	108. 34. 9
31		100. 35. 10	99. 0. 32	97. 26. 17	95. 52. 24
J. 1		88. 8. 31			

Diſtances of ☽'s Center from Stars, and from ☉ eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	α Pegaſi.	52. 38. 19	51. 2. 33	49. 27. 36	47. 53. 27
2		40. 16. 35			
1	The Sun.	102. 53. 52	101. 15. 55	99. 38. 15	98. 0. 54
2		89. 58. 46	88. 23. 14	86. 48. 0	85. 13. 3
3		77. 22. 55	75. 49. 45	74. 16. 53	72. 44. 17
4		65. 5. 25	63. 34. 28	62. 3. 46	60. 33. 20
5		53. 4. 57	51. 36. 0	50. 7. 17	48. 38. 48
6		41. 19. 54	39. 52. 49		
12	Regulus.	68. 34. 52	67. 6. 9	65. 37. 29	64. 8. 52
13		56. 46. 14	55. 17. 47	53. 49. 19	52. 20. 52
14		44. 58. 24	43. 29. 49	42. 1. 11	40. 32. 30
15		33. 8. 10	31. 39. 4	30. 9. 53	28. 40. 37
16		21. 12. 47	19. 42. 54	18. 12. 56	16. 42. 55
17	Spica ♍	62. 38. 39	61. 6. 46	59. 34. 39	58. 2. 15
18		50. 16. 13	48. 42. 9	47. 7. 47	45. 33. 7
19		37. 35. 0	35. 58. 25	34. 21. 33	32. 44. 22
20		24. 34. 5	22. 55. 21	21. 16. 32	19. 37. 41
21	Antares.	57. 3. 21	55. 21. 3	53. 38. 26	51. 55. 29
22		43. 16. 11	41. 31. 36	39. 46. 52	38. 2. 0
23		29. 18. 0			
23	α Aquilæ.	79. 29. 28	77. 49. 45	76. 9. 52	74. 29. 51
24		66. 9. 40	64. 29. 57	62. 50. 27	61. 11. 14
25		53. 2. 1	51. 26. 10	49. 51. 11	48. 17. 11
26	β Capricorni.	36. 49. 56	34. 56. 5	33. 2. 23	31. 8. 50
27		21. 43. 55	19. 51. 40	17. 59. 41	16. 8. 0
28	α Pegaſi.	56. 59. 9	55. 18. 26	53. 38. 29	51. 59. 19
29		43. 56. 43	42. 23. 21	40. 51. 13	39. 20. 26
30		32. 11. 2			
30	α Arietis.	71. 52. 16	70. 11. 43	68. 31. 37	66. 51. 59
31		58. 40. 55	57. 4. 10	55. 27. 55	53. 52. 11
29	The Sun.	120. 0. 58	118. 21. 41	116. 42. 48	115. 4. 18
30		106. 57. 35	105. 21. 24	103. 45. 36	102. 10. 11
31		94. 18. 54	92. 45. 46	91. 12. 59	89. 40. 34

MAY 1774.

Diſtances of ☽'s Center from Stars, and from ⊙ weſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S	D. M. S.	D. M. S.
1	Antares.	45. 47. 9	47. 31. 2	49. 14. 45	50. 58. 19
2		59. 33. 19	61. 15. 38	62. 57. 43	64. 39. 34
3		73. 5. 6			
3	β Capri-corni.	18. 34. 14	20. 16. 0	21. 57. 29	23. 38. 41
4		32. 0. 31	33. 40. 4	35. 19. 22	36. 58. 24
5		45. 9. 43	46. 47. 14	48. 24. 30	50. 1. 33
6	α Aquilæ.	64. 40. 54	66. 5. 28	67. 30. 7	68. 54. 49
7		75. 58. 24	77. 23. 3	78. 47. 37	80. 12. 9
8		87. 13. 26	88. 37. 21	90. 1. 7	
14	The Sun.	42. 36. 16	43. 57. 6	45. 18. 0	46. 38. 57
15		53. 24. 41	54. 46. 4	56. 7. 32	57. 29. 6
16		64. 18. 42	65. 41. 0	67. 3. 29	68. 26. 7
17		75. 22. 10	76. 45. 59	78. 10. 1	79. 34. 17
18		86. 39. 23	88. 5. 14	89. 31. 23	90. 57. 50
19		98. 14. 53	99. 43. 20	101. 12. 8	102. 41. 19
20		110. 12. 45	111. 44. 15	113. 16. 10	114. 48. 30
18	Pollux.	35. 7. 55	36. 36. 11	38. 5. 4	39. 34. 33
19		47. 10. 20	48. 43. 6	50. 16. 20	51. 50. 5
20	Regulus.	22. 57. 14	24. 35. 48	26. 14. 51	27. 54. 22
21		36. 18. 50	38. 1. 8	39. 43. 54	41. 27. 8
22		50. 10. 9	51. 56. 7	53. 42. 32	55. 29. 22
23		64. 29. 54			
23	Spica ♍	11. 46. 49	13. 28. 33	15. 12. 14	16. 57. 34
24		25. 59. 13	27. 49. 33	29. 40. 21	31. 31. 33
25		40. 52. 29	42. 45. 26	44. 38. 32	46. 31. 48
26		55. 59. 29	57. 53. 7	59. 46. 42	61. 40. 16
27		71. 6. 40			
27	Antares.	26. 37. 18	28. 23. 15	30. 9. 44	31. 56. 40
28		40. 54. 56	42. 42. 46	44. 30. 32	46. 18. 11
29		55. 13. 36	56. 59. 57	58. 46. 1	60. 31. 48
30		69. 15. 44			
30	α Capri-corni.	14. 44. 35	16. 29. 48	18. 14. 39	19. 59. 6
31		28. 35. 39	30. 17. 48	31. 59. 35	33. 41. 0
J. 1		42. 2. 31			

MAY 1774.

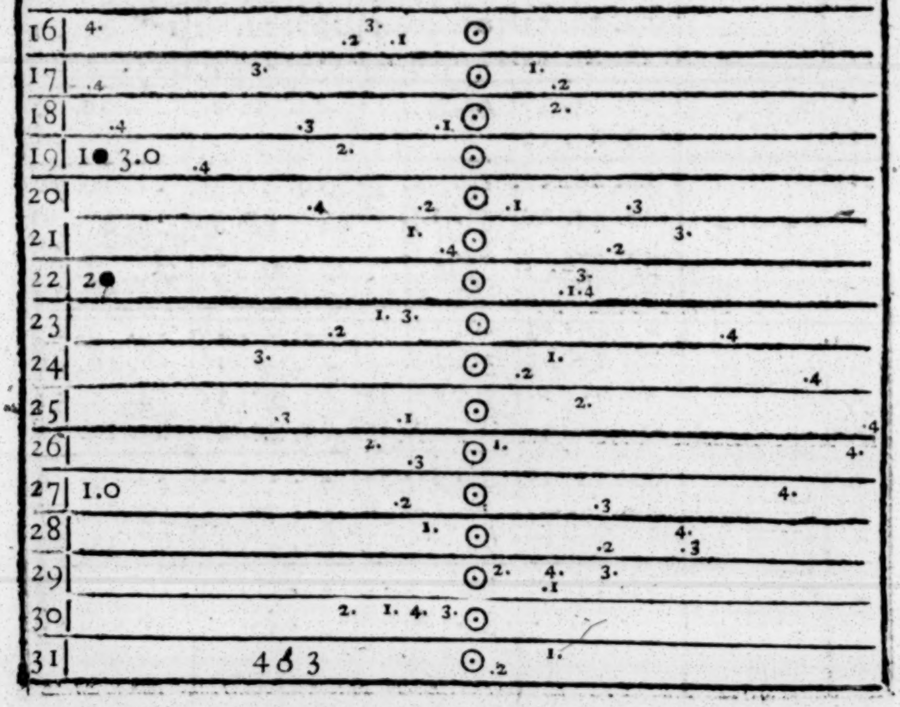
Diſtances of ☽'s Center from Stars, and from ☉ weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S	D. M. S.
1	Antares.	52. 41. 43	54. 24. 56	56. 7. 56	57. 50. 44
2		66. 21. 10	68. 2. 31	69. 43. 38	71. 24. 29
3	β Capricorni.	25. 19. 36	27. 0. 14	28. 40. 36	30. 20. 42
4		38. 37. 11	40. 15. 42	41. 53. 57	43. 31. 57
5		51. 38. 21			
5	α Aquilæ.	59. 3. 47	60. 27. 50	61. 52. 4	63. 16. 26
6		70. 19. 33	71. 44. 17	73. 9. 0	74. 33. 43
7		81. 36. 36	83. 0. 58	84. 25. 14	85. 49. 23
13	The Sun.			39. 54. 42	41. 15. 28
14		47. 59. 57	49. 21. 1	50. 42. 10	52. 3. 23
15		58. 50. 47	60. 12. 34	61. 34. 29	62. 56. 32
16		69. 48. 56	71. 11. 56	72. 35. 9	73. 58. 33
17		80. 58. 47	82. 23. 32	83. 48. 33	85. 13. 50
18		92. 24. 36	93. 51. 40	95. 19. 4	96. 46. 48
19		104. 10. 51	105. 40. 44	107. 11. 1	108. 41. 41
20		116. 21. 14	117. 54. 23	119. 27. 57	121. 1. 56
18	Pollux.	41. 4. 37	42. 35. 14	44. 6. 24	45. 38. 6
19		53. 24. 19			
19	Regulus.	16. 28. 12	18. 4. 38	19. 41. 38	21. 19. 10
20		29. 34. 20	31. 14. 46	32. 55. 39	34. 37. 0
21		43. 10. 50	44. 54. 59	46. 39. 35	48. 24. 38
22		57. 16. 39	59. 4. 21	60. 52. 27	62. 40. 59
23	Spica ♍	18. 44. 13	20. 31. 50	22. 20. 18	24. 9. 27
24		33. 23. 7	35. 15. 2	37. 7. 16	38. 59. 45
25		48. 25. 13	50. 18. 42	52. 12. 15	54. 5. 51
26		63. 33. 46	65. 27. 10	67. 20. 28	69. 13. 39
27	Antares.	33. 43. 58	35. 31. 31	37. 19. 15	39. 7. 4
28		48. 5. 41	49. 53. 0	51. 40. 5	53. 26. 57
29		62. 17. 16	64. 2. 25	65. 47. 12	67. 31. 39
30	β Capricorni.	21. 43. 11	23. 26. 52	25. 10. 11	26. 53. 6
31		35. 22. 2	37. 2. 42	38. 43. 0	40. 22. 56

MAY 1774.

Configurations of the SATELLITES of JUPITER at ½ Hour paſt 3 o' th' Clock in the Morning.

JUPITER's Satellites will not be viſible the Beginning of this Month, being too near the SUN.



JUNE 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	W.	Nicomede. Oxf. Term
2	Th.	[begins.
3	F.	Trinity Term begins.
4	Sa.	*K. George* III. *born.*
5	*Su.*	*1ſt Sunday after Trinity.*
6	M.	In 8 days of H. Trinity,
7	Tu.	[2 ret.
8	W.	
9	Th.	
10	F.	*Prs. Amelia born.*
11	Sa.	*St. Barnabas.*
12	*Su.*	*2d Sunday after Trinity.*
13	M.	In 15 days of H. Trin
14	Tu.	[3 ret.
15	W.	
16	Th.	
17	F.	S. Alban.
18	Sa.	
19	*Su.*	*3d Sunday after Trinity.*
20	M.	Tr. Ed. K. W. S. In 3
21	Tu.	[weeks of H. Tr. 4 ret.
22	W.	Term ends.
23	Th.	
24	F.	*Nativ. of St. John Bapt.*
25	Sa.	
26	*Su.*	*4th Sunday after Trinity.*
27	M.	
28	Tu.	
29	W.	*St. Peter.*
30	Th.	

Phaſes of the Moon.

	D. H. M.
New Moon —	8. 18. 20
Firſt Quarter —	16. 19. 20
Full Moon —	23. 11. 57
Laſt Quarter —	30. 6. 59

Other Phenomena.

D.
7. ☾ γ ♉ 10^{h}. 39′.
☾ 1 ad δ ♉ 12^{h}. 48′.
☾ 2 ad δ ♉ 13^{h}. 19′.
☾ α ♉ 18^{h}. 41′.
12. ☌ ♃ ♀ diff. Lat. 1°. 33′.
13. ☾ ξ ♌ 19^{h}. 20′.
14. ☿ inf. cor. Bor. ♉ diff. Lat. 4′.
☾ ο ♌ 0^{h}. 29′.
16. ☾ τ ♌ 5^{h}. 1′.
☾ β ♍ 15^{h}. 29′.
17. ☾ η ♍ 5^{h}. 41′.
18. ☾ θ ♍ 5^{h}. 44′.
19. ☿ ε ♊ diff. Lat. 14′.
☾ κ ♍ Im. 9^{h}. 40′. Em. 9^{h}. 53′. * 16′ N. of ☽'s center.
20. ☾ γ ♎ 20^{h}. 0′.
☉ enters ♋ at 22^{h}. 57′.
☾ η ♎ 23^{h}. 38′.
21. ☾ θ ♎ 3^{h}. 40′.
☾ φ Serpent. 17^{h}. 43′.
25. ☾ β ♑ 8^{h}. 58′.
27. ☾ λ ♒ 23^{h}. 42′.
28. ☾ φ ♒ 9^{h}. 30′.

JUNE 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Aſc. in Time.	Sun's Declin. North.	Equat. of Time. Sub.	Diff.
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	W.	2. 10. 56. 4	4. 37. 25,2	22. 6. 31	2. 38,9	9,1
2	Th.	2. 11. 53. 29	4. 41. 30,9	22. 14. 23	2. 29,8	9,5
3	F.	2. 12. 50. 54	4. 45. 37,0	22. 21. 52	2. 20,3	10,0
4	Sa.	2. 13. 48. 19	4. 49. 43,6	22. 28. 58	2. 10,3	10,3
5	*Su.*	2. 14. 45. 43	4. 53. 50,5	22. 35. 40	2. 0,0	10,6
6	M.	2. 15. 43. 6	4. 57. 57,7	22. 41. 59	1. 49,4	11,0
7	Tu.	2. 16. 40. 29	5. 2. 5,2	22. 47. 53	1. 38,4	11,3
8	W.	2. 17. 37. 51	5. 6. 13,1	22. 53. 24	1. 27,1	11,6
9	Th.	2. 18. 35. 13	5. 10. 21,2	22. 58. 31	1. 15,5	11,8
10	F.	2. 19. 32. 34	5. 14. 29,6	23. 3. 13	1. 3,7	12,0
11	Sa.	2. 20. 29. 54	5. 18. 38,3	23. 7. 31	0. 51,7	12,2
12	*Su.*	2. 21. 27. 13	5. 22. 47,0	23. 11. 25	0. 39,5	12,4
13	M.	2. 22. 24. 32	5. 26. 56,0	23. 14. 54	0. 27,1	12,5
14	Tu.	2. 23. 21. 49	5. 31. 5,1	23. 17. 58	0. 14,6	12,6
15	W.	2. 24. 19. 6	5. 35. 14,4	23. 20. 38	0. 2,0	12,8
16	Th.	2. 25. 16. 22	5. 39. 23,7	23. 22. 53	Ad: 10,8	12,8
17	F.	2. 26. 13. 37	5. 43. 33,1	23. 24. 44	0. 23,6	12,9
18	Sa.	2. 27. 10. 52	5. 47. 42,6	23. 26. 10	0. 36,5	12,9
19	*Su.*	2. 28. 8. 5	5. 51. 52,0	23. 27. 11	0. 49,4	12,8
20	M.	2. 29. 5. 18	5. 56. 1,5	23. 27. 47	1. 2,2	12,9
21	Tu.	3. 0. 2. 31	6. 0. 11,0	23. 27. 58	1. 15,1	12,9
22	W.	3. 0. 59. 43	6. 4. 20,4	23. 27. 45	1. 28,0	12,7
23	Th.	3. 1. 56. 54	6. 8. 29,7	23. 27. 6	1. 40,7	12,7
24	F.	3. 2. 54. 5	6. 12. 39,0	23. 26. 3	1. 53,4	12,6
25	Sa.	3. 3. 51. 16	6. 16. 48,2	23. 24. 35	2. 6,0	12,5
26	*Su.*	3. 4. 48. 27	6. 20. 57,3	23. 22. 43	2. 18,5	12,4
27	M.	3. 5. 45. 38	6. 25. 6,2	23. 20. 26	2. 30,9	12,2
28	Tu.	3. 6. 42. 49	6. 29. 15,1	23. 17. 45	2. 43,1	12,1
29	W.	3. 7. 40. 1	6. 33. 23,7	23. 14. 38	2. 55,2	11,9
30	Th.	3. 8. 37. 13	6. 37. 32,2	23. 11. 8	3. 7,1	

JUNE 1774.

Days.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	15. 48,8	1. 8,3	2. 23,6	0. 006363	5. 18. 4
7	15. 48,1	1. 8,6	2. 23,3	0. 006696	5. 17. 45
13	15. 47,5	1. 8,7	2. 23,2	0. 006936	5. 17. 26
19	15. 47,1	1. 8,8	2. 23,0	0. 007093	5. 17. 7
25	15. 46,9	1. 8,8	2. 23,0	0. 007189	5. 16. 48

Eclipſes of the SATELLITES of JUPITER.

I. Satellite.
Immerſions.

Days	H. M. S.
1	18. 23. 23
3	12. 51. 40
5	7. 19. 55
7	1. 48. 13
8	20. 16. 26
10	14. 44. 41
12	9. 12. 50
14	3. 41. 5
15	22. 9. 14
17	16. 37. 25
19	11. 5. 35
21	5. 33. 46
23	0. 1. 52
24	18. 29. 59
26	12. 58. 12
28	7. 26. 24
30	1. 54. 30

II. Satellite.
Immerſions.

Days	H. M. S.
1	5. 20. 14
4	18. 37. 25
8	7. 54. 39
11	21. 11. 52
15	10. 29. 5
18	23. 46. 15
22	13. 3. 27
26	2. 20. 35
29	15. 37. 52

III. Satellite.

Days	H. M. S.	
5	13. 14. 48	I
5	15. 1. 9	E
12	17. 14. 45	I
12	19. 0. 0	E
19	21. 14. 25	I
19	22. 58. 35	E
27	1. 14. 4	I
27	2. 57. 10	E

IV. Satellite. Conj.

6	10. 30. 42	Inf.
14	19. 57. 5	Sup.
23	4. 38. 53	Inf.

JUNE 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſ. over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
MERCURY. Sup. ☌ 13^{d} 10^{h}.						
1	0. 9. 16	4. 10 S	1. 26. 40	1. 10 S	18. 18 N	23. 5
7	1. 12. 52	0. 22 S	2. 8. 52	0. 5 S	21. 44	23. 32
13	2. 20. 14	3. 58 N	2. 21. 54	0. 55 N	24. 8	0. 0
19	3. 26. 59	6. 37	3. 4. 55	1. 38	25. 1	0. 30
25	4. 29. 5	6. 48	3. 17. 9	1. 55	24. 16	0. 59
VENUS.						
1	9. 24. 36	2. 11 S	0. 25. 7	2. 16 S	7. 37 N	20. 59
7	10. 4. 5	2. 35	1. 1. 0	2. 30	9. 30	20. 57
13	10. 13. 34	2. 54	1. 7. 4	2. 39	11. 23	20. 55
19	10. 23. 4	3. 9	1. 13. 18	2. 43	13. 14	20. 55
25	11. 2. 34	3. 19	1. 19. 41	2. 42	15. 4	20 55
MARS.						
1	0. 23. 40	0. 46 S	1. 13. 4	0. 29 S	15. 19 N	22. 4
7	0. 27. 12	0. 40	1. 17. 26	0. 26	16. 39	21. 57
13	1. 0. 43	0. 34	1. 21. 47	0. 22	17. 53	21. 50
19	1. 4. 12	0. 27	1. 26. 5	0. 18	19. 1	21. 42
25	1. 7. 39	0. 20	2. 0. 21	0. 14	20. 2	21. 35
JUPITER.						
1	0. 26. 57	1. 15 S	1. 4. 0	1. 5 S	11. 51 N	21. 28
7	0. 27. 30	1. 15	1. 5. 16	1. 5	12. 16	21. 8
13	0. 28. 2	1. 15	1. 6. 30	1. 6	12. 40	20. 48
19	0. 28. 35	1. 14	1. 7. 41	1. 7	13. 2	20. 28
25	0. 29. 8	1. 14	1. 8. 48	1. 7	13. 23	20. 7
SATURN. □ 10^{d}. 3^{h}.						
1	5. 25. 32	2. 15 N	5. 19. 27	2. 18 N	6. 18 N	6. 46
7	5. 25. 44	2. 15	5. 19. 35	2. 17	6. 14	6. 22
13	5. 25. 57	2. 16	5. 19. 47	2. 16	6. 8	5. 58
19	5. 26. 9	2. 16	5. 20. 3	2. 14	6. 0	5. 34
25	5. 26. 21	2. 16	5. 20. 21	2. 13	5. 52	5. 10

JUNE 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midnight.
		S. D. M. S.	S. D. M. S.	D. M. S.	D. M. S.
1	W.	11. 12. 47. 33	11. 19. 20. 55	0. 29. 50 N	0. 4. 50 S
2	Th.	11. 25. 49. 2	0. 2. 12. 25	0. 38. 57 S	1. 12. 10
3	F.	0. 8. 31. 26	0. 14. 46. 38	1. 44. 5	2. 14. 21
4	Sa.	0. 20. 58. 24	0. 27. 7. 22	2. 42. 47	3. 9. 0
5	*Su.*	1. 3. 13. 41	1. 9. 17. 52	3. 32. 51	3. 54. 4
6	M.	1. 15. 20. 12	1. 21. 21. 1	4. 12. 36	4. 28. 7
7	Tu.	1. 27. 20. 30	2. 3. 19. 1	4. 40. 38	4. 50. 0
8	W.	2. 9. 16. 31	2. 15. 13. 29	4. 56. 10	4. 59. 4
9	Th.	2. 21. 9. 52	2. 27. 5. 55	4. 58. 44	4. 55. 11
10	F.	3. 3. 1. 45	3. 8. 57. 42	4. 48. 20	4. 38. 25
11	Sa.	3. 14. 53. 46	3. 20. 50. 25	4. 25. 24	4. 9. 32
12	*Su.*	3. 26. 47. 45	4. 2. 46. 13	3. 50. 49	3. 29. 31
13	M.	4. 8. 46. 4	4. 14. 47. 54	3. 5. 48	2. 39. 50
14	Tu.	4. 20. 51. 54	4. 26. 58. 47	2. 11. 49	1. 42. 7
15	W.	5. 3. 9. 0	5. 9. 22. 59	1. 10. 53	0. 38. 26 S
16	Th.	5. 15. 41. 25	5. 22. 4. 49	0. 5. 9 S	0. 28. 39 N
17	F.	5. 28. 33. 49	6. 5. 8. 50	1. 2. 35 N	1. 36. 12
18	Sa.	6. 11. 50. 22	6. 18. 38. 37	2. 9. 4	2. 40. 39
19	*Su.*	6. 25. 34. 8	7. 2. 36. 50	3. 10. 24	3. 37. 51
20	M.	7. 9. 46. 44	7. 17. 3. 36	4. 2. 11	4. 23. 5
21	Tu.	7. 24. 26. 59	8. 1. 55. 58	4. 39. 56	4. 52. 10
22	W.	8. 9. 29. 46	8. 17. 7. 11	4. 59. 26	5. 1. 28
23	Th.	8. 24. 46. 45	9. 2. 27. 3	4. 58. 7	4. 49. 23
24	F.	9. 10. 6. 44	9. 17. 44. 10	4. 35. 27	4. 16. 38
25	Sa.	9. 25. 17. 59	10. 2. 47. 11	3. 53. 24	3. 26. 22
26	*Su.*	10. 10. 10. 41	10. 17. 27. 41	2. 56. 7	2. 23. 24
27	M.	10. 24. 37. 46	11. 1. 40. 38	1. 48. 53	1. 13. 12
28	Tu.	11. 8. 36. 17	11. 15. 24. 52	0. 36. 59 N	0. 0. 50 N
29	W.	11. 22. 6. 24	11. 28. 41. 32	0. 34. 44 S	1. 9. 18 S
30	Th.	0. 5. 10. 34	0. 11. 34. 6	1. 42. 23	2. 13. 44

JUNE 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſc. at Midn.	☽'s Declination at Noon.	☽'s Declination at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	W.	23	18. 54	343. 57	350. 15	6. 18 S	4. 18 S
2	Th.	24	19. 40	356. 25	2. 30	2. 16 S	0. 13 S
3	F.	25	20. 25	8. 31	14. 28	1. 47 N	3. 46 N
4	Sa.	26	21. 10	20. 24	26. 19	5. 41	7. 31
5	*Su.*	27	21. 55	32. 14	38. 10	9. 16	10. 54
6	M.	28	22. 40	44. 7	50. 7	12. 25	13. 48
7	Tu.	29	23. 26	56. 9	62. 15	15. 2	16. 6
8	W.	1	☌	68. 22	74. 32	16. 59	17. 41
9	Th.	2	0. 13	80. 44	86. 57	18. 12	18. 31
10	F.	3	1. 0	93. 11	99. 25	18. 38	18. 32
11	Sa.	4	1. 47	105. 39	111. 52	18. 14	17. 44
12	*Su.*	5	2. 34	118. 4	124. 14	17. 3	16. 10
13	M.	6	3. 21	130. 22	136. 28	15. 6	13. 52
14	Tu.	7	4. 7	142. 33	148. 36	12. 28	10. 56
15	W.	8	4. 52	154. 39	160. 43	9. 16	7. 28
16	Th.	9	5. 38	166. 48	172. 55	5. 34	3. 36 N
17	F.	10	6. 25	179. 6	185. 22	1. 32 N	0. 35 S
18	Sa.	11	7. 14	191. 44	198. 13	2. 42 S	4. 50
19	*Su.*	12	8. 4	204. 52	211. 40	6. 56	8. 59
20	M.	13	8. 58	218. 40	225. 52	10. 56	12. 44
21	Tu.	14	9. 56	233. 15	240. 50	14. 23	15. 48
22	W.	15	10. 57	248. 36	256. 31	16. 58	17. 50
23	Th.	16	12. 0	264. 31	272. 35	18. 24	18. 37
24	F.	17	13. 2	280. 38	288. 38	18. 30	18. 3
25	Sa.	18	14. 3	296. 31	304. 16	17. 17	16. 13
26	*Su.*	19	15. 0	311. 49	319. 10	14. 53	13. 20
27	M.	20	15. 54	326. 19	333. 15	11. 37	9. 45
28	Tu.	21	16. 44	340. 0	346. 34	7. 47	5. 45
29	W.	22	17. 32	352. 59	359. 16	3. 40 S	1. 35 S
30	Th.	23	18. 18	5. 26	11. 30	0. 30 N	2. 32 N

JUNE 1774.

Days of the Month.	Days of the Week.	Semid^{r}. ☽ at Noon.	Semid^{r}. ☽ at Midnight.	Hor. Par. ☽ at Noon.	Hor. Par. ☽ at Midnight.	Proport. Logar. at Noon.	Proport. Logar. at Midn.
		M. S.	M. S.	M. S.	M. S.		
1	W.	15. 40	15. 33	57. 29	57. 5	4957	4987
2	Th.	15. 27	15. 21	56. 42	56. 20	5017	5045
3	F.	15. 16	15. 10	56. 0	55. 42	5071	5094
4	Sa.	15. 6	15. 2	55. 24	55. 10	5118	5136
5	*Su.*	14. 58	14. 55	54. 56	54. 44	5154	5170
6	M.	14. 52	14. 50	54. 34	54. 25	5183	5195
7	Tu.	14. 48	14. 46	54. 18	54. 12	5205	5213
8	W.	14. 45	14. 44	54. 7	54. 4	5219	5223
9	Th.	14. 43	14. 43	54. 2	54. 2	5226	5226
10	F.	14. 43	14. 44	54. 2	54. 4	5226	5223
11	Sa.	14. 45	14. 46	54. 8	54. 13	5218	5211
12	*Su.*	14. 48	14. 51	54. 20	54. 28	5202	5191
13	M.	14. 53	14. 57	54. 38	54. 51	5178	5161
14	Tu.	15. 0	15. 5	55. 5	55. 21	5142	5122
15	W.	15. 9	15. 15	55. 39	55. 59	5098	5072
16	Th.	15, 21	15. 27	56. 21	56. 45	5044	5013
17	F.	15. 35	15. 42	57. 10	57. 37	4981	4947
18	Sa.	15. 50	15. 57	58. 5	58. 33	4912	4877
19	*Su.*	16. 5	16. 13	59. 1	59. 29	4843	4809
20	M.	16. 20	16. 26	59. 55	60. 20	4777	4747
21	Tu.	16. 32	16. 38	60. 42	61. 1	4721	4698
22	W.	16. 42	16. 45	61. 16	61. 26	4680	4669
23	Th.	16. 46	16. 46	61. 32	61. 33	4661	4660
24	F.	16. 45	16. 43	61. 28	61. 19	4666	4677
25	Sa.	16. 39	16. 34	61, 5	60. 47	4693	4715
26	*Su.*	16. 28	16. 21	60, 25	60. 1	4741	4770
27	M.	16. 14	16. 6	59. 34	59. 6	4802	4837
28	Tu.	15. 58	15. 51	58. 37	58. 8	4872	4908
29	W.	15. 43	15. 35	57. 40	57. 12	4943	4979
30	Th.	15. 28	15. 21	56. 45	56. 21	5013	5044

JUNE 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	The Sun.	88. 8. 31	86. 36. 50	85. 5. 30	83. 34. 30
2		76. 4. 30	74. 35. 27	73. 6. 41	71. 38. 14
3		64. 20. 13	62. 53. 26	61. 26. 54	60. 0. 37
4		52. 52. 50	51. 27. 56	50. 3. 14	48. 38. 44
5		41. 39. 28	40. 16. 13	38. 53. 8	
11	Regulus.	42. 2. 29	40. 33. 43	39. 4. 54	37. 36. 3
12		30. 11. 3	28. 41. 52	27. 12. 37	25. 43. 19
13		18. 15. 56	16. 46. 21	15. 16. 45	13. 47. 9
14	Spica ♍	59. 47. 16	58. 16. 3	56. 44. 39	55. 13. 3
15		47. 32. 5	45. 59. 17	44. 26. 15	42. 53. 0
16		35. 3. 13	33. 28. 35	31. 53. 43	30. 18. 38
17		22. 20. 36	20. 44. 44	19. 8. 58	17. 33. 22
18	Antares.	55. 8. 34	53. 29. 2	51. 49. 11	50. 9. 3
19		41. 44. 5	40. 2. 23	38. 20. 32	36. 38. 36
20		28. 9. 9			
20	α Aquilæ.	78. 16. 39	76. 39. 23	75. 1. 52	73. 24. 10
21		65. 14. 23	63. 36. 30	61. 58. 45	60. 21. 12
22		52. 18. 44	50. 43. 53	49. 9. 50	47. 36. 42
23	β Capricorni.	35. 59. 37	34. 5. 2	32. 10. 25	30. 15. 48
24		20. 43. 18			
24	α Pegaſi.	69. 50. 48	68. 4. 13	66. 17. 57	64. 32. 3
25		55. 49. 48	54. 7. 7	52. 25. 10	50. 44. 0
26		42. 32. 28	40. 57. 39	39. 24. 16	37. 52. 25
27	α Arietis.	69. 52. 11	68. 8. 59	66. 26. 18	64. 44. 9
28		56. 21. 31	54. 42. 42	53. 4. 29	51. 26. 55
29		43. 29. 9	41. 55. 45	40. 23. 7	38. 51. 19
30		31. 26. 41	30. 1. 10	28. 37. 2	27. 14. 22
28	The Sun.	118. 6. 26	116. 30. 50	114. 55. 39	113. 20. 53
29		105. 33. 34	104. 1. 20	102. 29. 29	100. 58. 2
30		93. 26. 34	91. 57. 22	90. 28. 30	88. 59. 59
J. 1		81. 42. 24			

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S	D. M. S.
1	The Sun.	82. 3. 51	80. 33. 32	79. 3. 32	77. 33. 52
2		70. 10. 4	68. 42. 12	67. 14. 36	65. 47. 16
3		58. 34. 35	57. 8. 48	55. 43. 15	54. 17. 56
4		47. 14. 27	45. 50. 24	44. 26. 33	43. 2. 55
10	Regulus.	47. 57. 9	46. 28. 33	44. 59. 54	43. 31. 13
11		36. 7. 9	34. 38. 13	33. 9. 13	31. 40. 10
12		24. 13. 57	22. 44. 31	21. 15. 2	19. 45. 30
13		12. 17. 32			
13	Spica ♍	65. 50. 22	64. 19. 51	62. 49. 10	61. 18. 18
14		53. 41. 16	52. 9. 17	50. 37. 5	49. 4. 41
15		41. 19. 31	39. 45. 47	38. 11. 49	36. 37. 38
16		28. 43. 20	27. 7. 51	25. 32. 13	23. 56. 27
17		15. 58. 3			
17	Antares.	61. 43. 34	60. 5. 18	58. 26. 43	56. 47. 48
18		48. 28. 37	46. 47. 51	45. 6. 49	43. 25. 33
19		34. 56. 37	33. 14. 38	31. 32. 42	29. 50. 51
20	α Aquilæ.	71. 46. 19	70. 8. 20	68. 30. 22	66. 52. 21
21		58. 43. 54	57. 6. 55	55. 30. 21	53. 54. 15
22		46. 4. 37			
22	β Capricorni.	43. 37. 16	41. 43. 0	39. 48. 37	37. 54. 9
23		28. 21. 11	26. 26. 37	24. 32. 5	22. 37. 39
24	α Pegaſi.	62. 46. 34	61. 1. 32	59. 17. 3	57. 33. 9
25		49. 3. 40	47. 24. 16	45. 45. 52	44. 8. 34
26		36. 22. 14			
26	α Arietis.	76. 49. 52	75. 4. 44	73. 20. 4	71. 35. 53
27		63. 2. 31	61. 21. 26	59. 40. 53	58. 0. 55
28		49. 49. 59	48. 13. 43	46. 38. 9	45. 3. 17
29		37. 20. 23	35. 50. 23	34. 21. 23	32. 53. 27
30		25. 53. 22			
27	The Sun.			121. 18. 55	119. 42. 28
28		111. 46. 33	110. 12. 41	108. 39. 14	107. 6. 12
29		99. 26. 58	97. 56. 19	96. 26. 2	94. 56. 7
30		87. 31. 49	86. 3. 59	84. 36. 28	83. 9. 17

JUNE 1774.

Diſtances of Moon's Center from Stars, and from ☉ weſt of her.

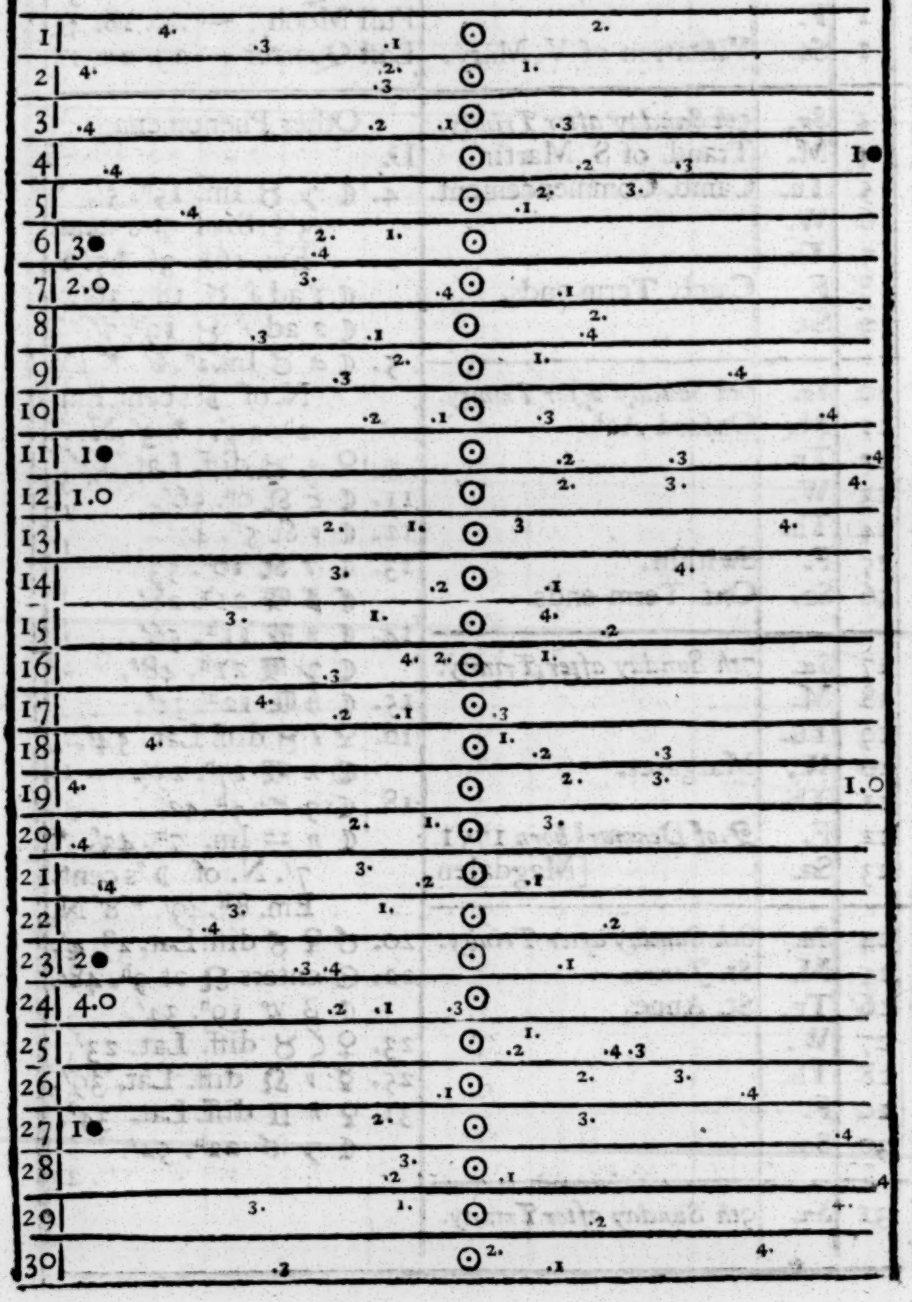
Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	β Capricorni.	42. 2. 31	43. 41. 44	45. 20. 36	46. 59. 7
2		55. 6. 50			
2	α Aquilæ.	62. 11. 38	63. 36. 20	65. 1. 3	66. 25. 46
3		73. 29. 4	74. 53. 34	76. 17. 58	77. 42. 17
4		84. 42. 8	86. 5. 43	87. 29. 10	88. 52. 29
5	α Pegaſi.	47. 59. 42	49. 21. 23	50. 43. 20	52. 5. 32
6		58. 59. 17	60. 22. 25	61. 45. 39	63. 8. 58
7		70. 6. 33			
12	The Sun.				39. 35. 58
13		46. 26. 19	47. 48. 53	49. 11. 37	50. 34. 32
14		57. 31. 42	58. 55. 43	60. 19. 57	61. 44. 24
15		68. 50. 11	70. 16. 4	71. 42. 13	73. 8. 38
16		80. 25. 3	81. 53. 15	83. 21. 47	84. 50. 39
17		92. 20. 11	93. 51. 11	95. 22. 33	96. 54. 18
18		104. 38. 52	106. 12. 58	107. 47. 28	109. 22. 22
19		117. 23. 19	119. 0. 46	120. 38. 36	
17	Regulus.	31. 52. 24	33. 30. 40	35. 9. 20	36. 48. 24
18		45. 9. 53	46. 51. 23	48. 33. 19	50. 15. 41
19		58. 54. 4	60. 39. 3	62. 24. 27	64. 10. 16
20	Spica ♍	20. 0. 48	21. 46. 6	23. 32. 17	25. 19. 14
21		34. 23. 0	36. 13. 14	38. 3. 53	39. 54. 55
22		49. 15. 15	51. 8. 12	53. 1. 23	54. 54. 47
23		64. 23. 59	66. 18. 8	68. 12. 19	70. 6. 32
24	Antares.	34. 40. 49	36. 30. 27	38. 20. 22	40. 10. 27
25		49. 21. 36	51. 11. 41	53. 1. 36	54. 51. 21
26		63. 56. 38	65. 44. 49	67. 32. 39	69. 20. 9
27		78. 12. 3			
27	β Capricorni.	23. 51. 8	25. 37. 45	27. 23. 56	29. 9. 41
28		37. 51. 57	39. 35. 7	41. 17. 50	43. 0. 8
29		51. 24. 56			
29	α Aquilæ.	59. 5. 54	60. 32. 23	61. 58. 53	63. 25. 22
30		70. 37. 8	72. 3. 12	73. 29. 8	74. 54. 55
J. 1		82. 1. 15			

JUNE 1774.

Diſtances of ☽'s center from Stars, and from ☉ weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	β Capric.	48. 37. 18	50. 15. 9	51. 52. 42	53. 29. 55
2	α Aquilæ.	67. 50. 30	69. 15. 12	70. 39. 52	72. 4. 29
3		79. 6. 30	80. 30. 36	81. 54. 34	83. 18. 25
4		90. 15. 40			
4	α Pegaſi.	42. 36. 22	43. 56. 38	45. 17. 18	46. 38. 20
5		53. 27. 58	54. 50. 34	56. 13. 19	57. 36. 14
6		64. 32. 23	65. 55. 52	67. 19. 23	68. 42. 57
12	The Sun.	40. 57. 44	42. 19. 39	43. 41. 43	45. 3. 56
13		51. 57. 37	53. 20. 52	54. 44. 17	56. 7. 54
14		63. 9. 5	64. 34. 0	65. 59. 9	67. 24. 33
15		74. 35. 19	76. 2. 18	77. 29. 35	78. 57. 10
16		86. 19. 51	87. 49. 24	89. 19. 18	90. 49. 34
17		98. 26. 25	99. 58. 56	101. 31. 51	103. 5. 10
18		110. 57. 42	112. 33. 28	114. 9. 40	115. 46. 17
16	Regulus.	25. 23. 12	26. 59. 55	28. 37. 2	30. 14. 31
17		38. 27. 53	40. 7. 46	41. 48. 4	43. 28. 46
18		51. 58. 28	53. 41. 43	55. 25. 24	57. 9. 31
19		65. 56. 31			
19	Spica ♍	13. 11. 24	14. 51. 30	16. 33. 15	18. 16. 27
20		27. 6. 52	28. 55. 7	30. 43. 55	32. 33. 13
21		41. 46. 19	43. 38. 5	45. 30. 10	47. 22. 34
22		56. 48. 21	58. 42. 4	60. 35. 56	62. 29. 55
23		72. 0. 45			
23	Antares.	27. 26. 53	29. 14. 26	31. 2. 40	32. 51. 30
24		42. 0. 40	43. 50. 55	45. 41. 11	47. 31. 25
25		56. 40. 56	58. 30. 16	60. 19. 19	62. 8. 7
26		71. 7. 19	72. 54. 6	74. 40. 29	76. 26. 28
27	β Capricorni.	30. 55. 0	32. 39. 53	34. 24. 20	36. 8. 22
28		44. 41. 59	46. 23. 24	48. 4. 21	49. 44. 52
29	α Aquilæ.	64. 51. 51	66. 18. 17	67. 44. 39	69. 10. 56
30		76. 20. 34	77. 46. 2	79. 11. 18	80. 36. 23

Configurations of the SATELLITES of JUPITER at 3 o'th' Clock in the Morning.



JULY 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	F.	
2	Sa.	Viſitation of V. Mary.
3	*Su.*	*5th Sunday after Trinity.*
4	M.	Tranſl. of S. Martin.
5	Tu.	Camb. Commencement.
6	W.	
7	Th.	
8	F.	Camb. Term ends.
9	Sa.	
10	*Su.*	*6th Sunday after Trinity.*
11	M.	Oxford Act.
12	Tu.	
13	W.	
14	Th.	
15	F.	Swithin.
16	Sa.	Oxf. Term ends.
17	*Su.*	*7th Sunday after Trinity.*
18	M.	
19	Tu.	
20	W.	Margaret.
21	Th.	
22	F.	*Q. of Denmark born* 1751.
23	Sa.	[Magdalen.
24	*Su.*	*8th Sunday after Trinity.*
25	M.	*St. James.*
26	Tu.	St. Anne.
27	W.	
28	Th.	
29	F.	
30	Sa.	
31	*Su.*	*9th Sunday after Trinity.*

Phaſes of the Moon.

	D.	H.	M.
New Moon —	8.	9.	17
Firſt Quarter —	16.	4.	36
Full Moon —	22.	18.	41
Laſt Quarter —	29.	20.	17

Other Phenomena.

D.

4. ☾ γ ♉ Im. 15^{h}. 5′. * 3′½ S. of ☽'s cent. Em. 16^{h}. 3′. * 5′ S.

☾ 1 ad δ ♉ 18^{h}. 36′.

☾ 2 ad δ ♉ 19^{h}. 7′.

5. ☾ α ♉ Im. 1^{h}. 6′. * 1′½ N. of ☽'s cent. Em. 2^{h}. 14′. * 3′ N.

9. ♀ ε ♉ diff. Lat. 12′.

11. ☾ ξ ♌ 0^{h}. 56′.

12. ☾ ρ ♌ 5^{h}. 47′.

13. ☾ τ ♌ 10^{h}. 53′.

☾ β ♍ 21^{h}. 28′.

14. ☾ η ♍ 11^{h}. 56′.

☾ γ ♍ 21^{h}. 48′.

15. ☾ θ ♍ 12^{h}. 31′.

16. ♀ ι ♉ diff. Lat. 54′.

☾ κ ♍ 17^{h}. 25′.

18. ☾ γ ♎ 4^{h}. 42′.

☾ η ♎ Im. 7^{h}. 43′. * 7′. N. of ☽'s cent. Em. 8^{h}. 49′. * 8′ N.

20. ☌ ♀ ♂ diff. Lat. 2°. 4′.

22. ☉ enters ♌ at 9^{h}. 48′.

☾ β ♑ 19^{h}. 34′.

23. ♀ ζ ♉ diff. Lat. 23′.

25. ☿ ν ♌ diff. Lat. 39′.

31. ♀ η ♊ diff. Lat. 34′.

☾ γ ♉ 22^{h}. 52′.

JULY 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Asc. in Time.	Sun's Declina. North.	Equat. of Time. Add.	Diff.
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	F.	3. 9. 34. 24	6. 41. 40,5	23. 7. 13	3. 18,7	11,4
2	Sa.	3. 10. 31. 36	6. 45. 48,5	23. 2. 53	3. 30,1	11,2
3	*Su.*	3. 11. 28. 49	6. 49. 56,2	22. 58. 10	3. 41,3	11,0
4	M.	3. 12. 26. 2	6. 54. 3,8	22. 53. 2	3. 52,3	10,6
5	Tu.	3. 13. 23. 16	6. 58. 10,9	22. 47. 31	4. 2,9	10,3
6	W.	3. 14. 20. 30	7. 2. 17,8	22. 41. 36	4. 13,2	10,0
7	Th.	3. 15. 17. 44	7. 6. 24,4	22. 35. 17	4. 23,2	9,6
8	F.	3. 16. 14. 58	7. 10. 30,5	22. 28. 34	4. 32,8	9,1
9	Sa.	3. 17. 12. 13	7. 14. 36,3	22. 21. 28	4. 41,9	8,8
10	*Su.*	3. 18. 9. 28	7. 18. 41,7	22. 13. 59	4. 50,7	8,4
11	M.	3. 19. 6. 43	7. 22. 46,7	22. 6. 8	4. 59,1	7,9
12	Tu.	3. 20. 3. 58	7. 26. 51,2	21. 57. 53	5. 7,0	7,4
13	W.	3. 21. 1. 13	7. 30. 55,1	21. 49. 16	5. 14,4	6,9
14	Th.	3. 21. 58. 28	7. 34. 58,6	21. 40. 16	5. 21,3	6,5
15	F.	3. 22. 55. 44	7. 39. 1,6	21. 30. 54	5. 27,8	5,9
16	Sa.	3. 23. 52. 59	7. 43. 4,1	21. 21. 10	5. 33,7	5,4
17	*Su.*	3. 24. 50. 15	7. 47. 6,0	21. 11. 4	5. 39,1	4,8
18	M.	3. 25. 47. 31	7. 51. 7,4	21. 0. 37	5. 43,9	4,2
19	Tu.	3. 26. 44. 47	7. 55. 8,3	20. 49. 49	5. 48,1	3,7
20	W.	3. 27. 42. 3	7. 59. 8,5	20. 38. 40	5. 51,8	3,2
21	Th.	3. 28. 39. 20	8. 3. 8,2	20. 27. 10	5. 55,0	2,5
22	F.	3. 29. 36. 37	8. 7. 7,3	20. 15. 19	5. 57,5	2,0
23	Sa.	4. 0. 33. 55	8. 11. 5,9	20. 3. 8	5. 59,5	1,5
24	*Su.*	4. 1. 31. 14	8. 15. 3,9	19. 50. 37	6. 1,0	0,8
25	M.	4. 2. 28. 33	8. 19. 1,3	19. 37. 46	6. 1,8	0,2
26	Tu.	4. 3. 25. 53	8. 22. 58,1	19. 24. 35	6. 2,0	0,3
27	W.	4. 4. 23. 14	8. 26. 54,3	19. 11. 5	6. 1,7	0,9
28	Th.	4. 5. 20. 36	8. 30. 50,0	18. 57. 16	6. 0,8	1,4
29	F.	4. 6. 18. 0	8. 34. 45,1	18. 43. 8	5. 59,4	2,0
30	Sa.	4. 7. 15. 25	8. 38. 39,6	18. 28. 42	5. 57,4	2,7
31	*Su.*	4. 8. 12. 51	8. 42. 33,5	18. 13. 57	5. 54,7	3,2

JULY 1774.

Days of the Month.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node,
	M. S.	M. S.	M. S.		S. D. M.
1	15. 46,9	1. 8,7	2. 23,0	0. 007235	5. 16. 29
7	15. 47,0	1. 8,4	2. 23,0	0. 007208	5. 16. 9
13	15. 47,2	1. 8,0	2. 23,1	0. 007083	5. 15. 50
19	15. 47,6	1. 7,6	2. 23,2	0. 006872	5. 15. 31
25	15. 48,2	1. 7,1	2. 23,4	0. 006606	5. 15. 12

Eclipſes of the SATELLITES of JUPITER.

I. Satellite.
Immerſions.

Days	H. M. S.
1	20. 22. 45
3	14*50. 54
5	9. 19. 8
7	3. 47. 20
8	22. 15. 33
10	16. 43. 48
12	11. 11. 57
14	5. 40. 14
16	0. 8. 33
17	18. 36. 51
19	13* 5. 11
21	7. 33. 37
23	2. 1. 55
24	20. 30. 23
26	14*58. 49
28	9. 27. 21
30	3. 55. 46
31	22. 24. 19

II. Satellite.

Days	H. M. S.	
3	4. 55. 20	I
3	7. 13. 53	E
6	18. 12. 49	I
6	20. 31. 17	E
10	7. 30. 26	I
10	9. 48. 52	E
13	20. 48. 9	I
13	23. 6. 32	E
17	10. 6. 1	I
17	12. 24. 23	E
20	23. 24. 4	I
21	1. 42. 22	E
24	12*42. 15	I
24	15* 0. 29	E
28	2. 0. 36	I
28	4. 18. 46	E
31	15*19. 7	I
31	17. 37. 15	E

III. Satellite.

Days	H. M. S.	
4	5. 13. 31	I
4	6. 56. 7	E
11	9. 13. 17	I
11	10. 54. 57	E
18	13*13. 22	I
18	14*54. 6	E
25	17. 13. 53	I
25	18. 53. 43	E

IV. Satellite.
Conjunctions.

1	14* 7	Sup.
9	23. 14	Inf.
18	8. 19	Sup.
26	17. 26	Inf.

JULY 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſage over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
	MERCURY. Gr. El. 21d.					
1	5. 25. 39	5. 24 N	3. 28. 11	1. 47 N	22. 17 N	1. 21
7	6. 17. 48	3. 18	4. 7. 59	1. 16	19. 31	1. 37
13	7. 7. 1	1. 5 N	4. 16. 31	0. 29 N	16. 22	1. 46
19	7. 24. 27	1. 3 S	4. 23. 39	0. 32 S	13. 9	1. 48
25	8. 11. 4	2. 59	4. 29. 9	1. 43	10. 11	1. 44
	VENUS.					
1	11. 12. 4	3. 23 S	1. 26. 9	2. 37 S	16. 45 N	20. 57
7	11. 21. 36	3. 22	2. 2. 47	2. 28	18. 19	20. 59
13	0. 1. 9	3. 15	2. 9. 29	2. 17	19. 38	21. 2
19	0. 10. 42	3. 3	2. 16. 15	2. 3	20. 42	21. 6
25	0. 20. 16	2. 45	2. 23. 6	1. 47	21. 30	21. 12
	MARS.					
1	1. 11. 4	0. 14 S	2. 4. 35	0. 9 S	20. 56 N	21. 27
7	1. 14. 27	0. 8	2. 8. 47	0. 5	21. 42	21. 21
13	1. 17. 48	0. 1 S	2. 12. 56	0. 1 S	22. 22	21. 14
19	1. 21. 7	0. 6 N	2. 17. 3	0. 4 N	22. 55	21. 8
25	1. 24. 24	0. 12	2. 21. 7	0. 9	23. 19	21. 1
	JUPITER.					
1	0. 29. 41	1. 14 S	1. 9. 53	1. 8 S	13. 43 N	19. 46
7	1. 0. 14	1. 14	1. 10. 53	1. 9	14. 1	19. 25
13	1. 0. 47	1. 13	1. 11. 49	1. 10	14. 18	19. 4
19	1. 1. 19	1. 13	1. 12. 40	1. 10	14. 33	18. 44
25	1. 1. 52	1. 13	1. 13. 27	1. 11	14. 46	18. 23
	SATURN.					
1	5. 26. 33	2. 16 N	5. 20. 43	2. 12 N	5. 42 N	4. 47
7	5. 26. 46	2. 16	5. 21. 8	2. 11	5. 32	4. 24
13	5. 26. 58	2. 17	5. 21. 36	2. 10	5. 20	4. 1
19	5. 27. 10	2. 17	5. 22. 6	2. 10	5. 8	3. 39
25	5. 27. 22	2. 17	5. 22. 39	2. 9	4. 54	3. 17

JULY 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M.S.
1	F.	0. 17. 52. 34	0. 24. 6. 35	2. 43. 2 S	3. 9.55 S
2	Sa.	1. 0. 16. 40	1. 6. 23. 25	3. 34. 26	3.56.10
3	*Su.*	1. 12. 27. 21	1. 18. 28. 57	4. 15. 5	4.30.58
4	M.	1. 24. 28. 37	2. 0. 26. 49	4. 43. 47	4.53.24
5	Tu.	2. 6. 23. 58	2. 12. 20. 19	4. 59. 50	5. 3. 1
6	W.	2. 18. 16. 20	2. 24. 12. 12	5. 2. 53	4.59.27
7	Th.	3. 0. 8. 3	3. 6. 4. 15	4. 52. 47	4.42.58
8	F.	3. 12. 0. 55	3. 17. 58. 15	4. 30. 2	4.14. 7
9	Sa.	3. 23. 56. 28	3. 29. 55. 45	3. 55. 20	3.33.54
10	*Su.*	4. 5. 56. 14	4. 11. 58. 16	3. 9. 59	2.43.49
11	M.	4. 18. 1. 57	4. 24. 7. 42	2. 15. 35	1.45.40
12	Tu.	5. 0. 15. 43	5. 6. 26. 27	1. 14. 14	0.41.44 S
13	W.	5. 12. 40. 9	5. 18. 57. 17	0. 8. 21 S	0.25.26 N
14	Th.	5. 25. 18. 17	6. 1. 43. 34	0. 59. 17 N	1.32.46
15	F.	6. 8. 13. 26	6. 14. 48. 28	2. 5. 30	2.37. 0
16	Sa.	6. 21. 28. 50	6. 28. 15. 5	3. 6. 48	3.34.26
17	*Su.*	7. 5. 7. 15	7. 12. 5. 43	3. 59. 22	4.21.13
18	M.	7. 19. 10. 12	7. 26. 20. 51	4. 39. 22	4.53.26
19	Tu.	8. 3. 37. 15	8. 10. 58. 55	5. 2. 59	5. 7.40
20	W.	8. 18. 25. 6	8. 25. 55. 4	5. 7. 14	5. 1.35
21	Th.	9. 3. 27. 39	9. 11. 1. 51	4. 50. 40	4.34.37
22	F.	9. 18. 36. 13	9. 26. 9. 37	4. 13. 44	3.48.24
23	Sa.	10. 3. 40. 41	10. 11. 8. 20	3. 19. 15	2.46.50
24	*Su.*	10. 18. 31. 23	10. 25. 49. 6	2. 11. 52	1.35. 8
25	M.	11. 3. 0. 42	11. 10. 5. 50	0. 57. 21 N	0.19.10 N
26	Tu.	11. 17. 4. 4	11. 23. 55. 23	0. 18. 42 S	0.55.42 S
27	W.	0. 0. 39. 53	0. 7. 17. 46	1. 31. 19	2. 5.10
28	Th.	0. 13. 49. 18	0. 20. 14. 52	2. 36. 50	3. 6. 1
29	F.	0. 26. 35. 4	1. 2. 50. 24	3. 32. 29	3.56. 5
30	Sa.	1. 9. 1. 16	1. 15. 8. 26	4. 16. 35	4.33.58
31	*Su.*	1. 21. 12. 20	1. 27. 13. 38	4. 48. 7	4.58.56

JULY 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſſage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſc. at Midn.	☽'s Declinat. at Noon.	☽'s Declin. at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	F.	24	19. 2	17. 31	23. 29	4. 31 N	6. 25 N
2	Sa.	25	19. 48	29. 26	35. 23	8. 14	9. 57
3	*Su.*	26	20. 33	41. 20	47. 18	11. 33	13. 1
4	M.	27	21. 19	53. 18	59. 20	14. 19	15. 29
5	Tu.	28	22. 5	65. 25	71. 33	16. 28	17. 17
6	W.	29	22. 52	77. 43	83. 55	17. 55	18. 21
7	Th.	30	23. 39	90. 8	96. 23	18. 35	18. 37
8	F.	1		102. 38	108. 53	18. 26	18. 4
9	Sa.	2	0. 26	115. 7	121. 20	17. 29	16. 42
10	*Su.*	3	1. 13	127. 31	133. 39	15. 44	14. 36
11	M.	4	1. 59	139. 45	145. 50	13. 17	11. 50
12	Tu.	5	2. 45	151. 54	157. 56	10. 14	8. 31
13	W.	6	3. 31	163. 58	170. 1	6. 41	4. 45
14	Th.	7	4. 18	176. 5	182. 12	2. 46 N	0. 44 N
15	F.	8	5. 5	188. 23	194. 39	1. 21 S	3. 26 S
16	Sa.	9	5. 53	201. 1	207. 31	5. 30	7. 31
17	*Su.*	10	6. 44	214. 11	221. 0	9. 29	11. 20
18	M.	11	7. 38	228. 1	235. 12	13. 3	14. 36
19	Tu.	12	8. 36	242. 36	250. 9	15. 56	17. 2
20	W.	13	9. 36	257. 52	265. 43	17. 51	18. 23
21	Th.	14	10. 38	273. 38	281. 36	18. 35	18. 27
22	F.	15	11. 38	289. 32	297. 25	17. 59	17. 12
23	Sa.	16	12. 38	305. 11	312. 49	16. 7	14. 47
24	*Su.*	17	13. 36	320. 16	327. 32	13. 12	11. 26
25	M.	18	14. 30	334. 37	341. 30	9. 31	7. 30
26	Tu.	19	15. 21	348. 13	354. 47	5. 24	3. 16 S
27	W.	20	16. 9	1. 13	7. 31	1. 8 S	0. 59 N
28	Th.	21	16. 56	13. 44	19. 52	3. 3 N	5. 3
29	F.	22	17. 42	25. 56	31. 59	6. 58	8. 46
30	Sa.	23	18. 28	38. 1	44. 2	10. 28	12. 1
31	*Su.*	24	19. 13	50. 4	56. 7	13. 27	14. 43

JULY 1774.

Days of the Month.	Days of the Week.	Semid^r. ☽ at Noon. M. S.	Semid^r. ☽ at Midnight. M. S.	Hor. Par. ☽ at Noon. M. S.	Hor. Par. ☽ at Midnight. M. S.	Proport. Logar. at Noon.	Proport. Logar. at Midn.
1	F.	15. 15	15. 9	55. 57	55. 37	5075	5100
2	Sa.	15. 4	15. 0	55. 18	55. 1	5125	5148
3	*Su.*	14. 56	14. 53	54. 47	54. 35	5166	5182
4	M.	14. 50	14. 48	54. 25	54. 17	5195	5206
5	Tu.	14. 46	14. 45	54. 11	54. 8	5214	5218
6	W.	14. 44	14. 44	54. 5	54. 4	5222	5223
7	Th.	14. 43	14. 44	54. 3	54. 5	5225	5222
8	F.	14. 45	14. 46	54. 9	54. 13	5217	5211
9	Sa.	14. 48	14. 50	54. 19	54. 26	5203	5194
10	*Su.*	14. 52	14. 55	54. 34	54. 43	5183	5171
11	M.	14. 58	15. 1	54. 54	55. 6	5157	5141
12	Tu.	15. 4	15. 8	55. 19	55. 34	5124	5104
13	W.	15. 13	15. 18	55. 50	56. 8	5084	5060
14	Th.	15. 23	15. 28	56. 27	56. 47	5036	5010
15	F.	15. 34	15. 40	57. 9	57. 31	4983	4955
16	Sa.	15. 46	15. 53	57. 55	58. 18	4924	4896
17	*Su.*	16. 0	16. 7	58. 43	59. 7	4865	4835
18	M.	16. 13	16. 19	59. 31	59. 53	4806	4779
19	Tu.	16. 24	16. 29	60. 14	60. 32	4754	4733
20	W.	16. 34	16. 37	60. 48	61. 0	4714	4699
21	Th.	16. 40	16. 41	61. 9	61. 13	4689	4684
22	F.	16. 41	16. 39	61. 13	61. 7	4684	4691
23	Sa.	16. 37	16. 33	60. 58	60. 44	4702	4718
24	*Su.*	16. 28	16. 22	60. 26	60. 5	4740	4765
25	M.	16. 16	16. 9	59. 42	59. 15	4793	4826
26	Tu.	16. 1	15. 53	58. 47	58. 19	4860	4895
27	W.	15. 46	15. 38	57. 51	57. 22	4930	4966
28	Th.	15. 30	15. 24	56. 55	56. 29	5000	5033
29	F.	15. 17	15. 11	56. 5	55. 43	5064	5093
30	Sa.	15. 5	15. 1	55. 23	55. 5	5119	5142
31	*Su.*	14. 57	14. 53	54. 50	54. 38	5162	5178

JULY - 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	The Sun.	81. 42. 23	80. 15. 48	78. 49. 30	77. 23. 28
2		70. 17. 20	68. 52. 50	67. 28. 33	66. 4. 29
3		59. 7. 8	57. 44. 12	56. 21. 26	54. 58. 49
4		48. 7. 58	46. 46. 11	45. 24. 30	44. 2. 56
5					
10	Spica ♍	74. 40. 33	73. 10. 27	71. 40. 16	70. 9. 59
11		62. 36. 53	61. 5. 53	59. 34. 43	58. 3. 26
12		50. 25. 4	48. 52. 57	47. 20. 40	45. 48. 14
13		38. 3. 55	36. 30. 36	34. 57. 8	33. 23. 32
14		25. 34. 0	23. 59. 59	22. 25. 59	20. 52. 2
15	Antares.	58. 43. 21	57. 6. 45	55. 29. 56	53. 52. 54
16		45. 44. 43	44. 6. 30	42. 28. 6	40. 49. 35
17		32. 36. 14	30. 57. 47	29. 19. 29	27. 41. 28
18	α Aquilæ.	69. 48. 33	68. 13. 49	66. 39. 4	65. 4. 21
19		57. 12. 27	55. 38. 49	54. 5. 34	52. 32. 46
20	β Capricorni.	42. 19. 39	40. 27. 57	38. 36. 3	36. 43. 56
21		27. 20. 54	25. 27. 55	23. 34. 50	21. 41. 41
22	α Pegaſi.	61. 58. 51	60. 14. 25	58. 30. 22	56. 46. 46
23		48. 17. 28	46. 37. 48	44. 59. 5	43. 21. 30
24		35. 33. 34			
24	α Arietis.	75. 49. 15	74. 2. 28	72. 16. 4	70. 30. 5
25		61. 46. 57	60. 3. 47	58. 21. 11	56. 39. 8
26		48. 18. 9	46. 39. 58	45. 2. 31	43. 25. 52
27		35. 35. 42			
27	Aldebaran.	65. 56. 17	64. 15. 51	62. 35. 51	60. 56. 17
28		52. 44. 40	51. 7. 34	49. 30. 50	47. 54. 29
29		39. 58. 1	38. 23. 43	36. 49. 44	35. 16. 4
30		27. 32. 18			
27	The Sun.			120. 36. 54	119. 4. 43
28		111. 29. 53	110. 0. 7	108. 30. 44	107. 1. 43
29		99. 41. 49	98. 14. 50	96. 48. 9	95. 21. 47
30		88. 14. 26	86. 49. 45	85. 25. 18	84. 1. 5
31		77. 3. 18	75. 40. 19	74. 17. 30	72. 54. 49
A. 1		66. 3. 39			

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours. D. M. S.	15 Hours. D. M. S.	18 Hours. D. M. S.	21 Hours. D. M. S.
1	The Sun.	75. 57. 44	74. 32. 16	73. 7. 2	71. 42. 4
2		64. 40. 37	63. 16. 58	61. 53. 30	60. 30. 14
3		53. 36. 22	52. 14. 4	50. 51. 54	49. 29. 52
4		42. 41. 29	41. 20. 8	39. 58. 52	
10	Spica ♍	68. 39. 36	67. 9. 5	65. 38. 28	64. 7. 44
11		56. 32. 1	55. 0. 29	53. 28. 50	51. 57. 1
12		44. 15. 40	42. 42. 57	41. 10. 5	39. 37. 4
13		31. 49. 50	30. 15. 59	28. 42. 2	27. 8. 2
14		19. 18. 7			
14	Antares.	65. 7. 18	63. 31. 42	61. 55. 50	60. 19. 43
15		52. 15. 39	50. 38. 12	49. 0. 34	47. 22. 44
16		39. 10. 58	37. 32. 15	35. 53. 30	34. 14. 50
17		26. 3. 45			
17	α Aquilæ.	76. 0. 24	74. 32. 11	72. 57. 46	71. 23. 13
18		63. 29. 42	61. 55. 5	60. 20. 39	58. 46. 25
19		51. 0. 28			
19	β Capricorni.	49. 43. 53	47. 53. 14	46. 2. 19	44. 11. 7
20		34. 51. 38	32. 59. 10	31. 6. 32	29. 13. 46
21		19. 48. 29			
21	α Pegaſi.	68. 59. 19	67. 13. 54	65. 28. 39	63. 43. 37
22		55. 3. 40	53. 21. 6	51. 39. 9	49. 57. 58
23		41. 45. 3	40. 9. 56	38. 36. 15	37. 4. 5
24	α Arietis.	68. 44. 32	66. 59. 25	65. 14. 47	63. 30. 37
25		54. 57. 40	53. 16. 48	51. 36. 35	49. 57. 2
26		41. 50. 2	40. 15. 4	38. 41. 0	37. 7. 52
27	Aldebaran.	59. 17. 8	57. 38. 24	56. 0. 5	54. 22. 10
28		46. 18. 30	44. 42. 52	43. 7. 35	41. 32. 38
29		33. 42. 43	32. 9. 40	30. 36. 55	29. 4. 28
27	The Sun.	117. 32. 57	116. 1. 35	114. 30. 37	113. 0. 3
28		105. 33. 3	104. 4. 44	102. 36. 46	101. 9. 7
29		93. 55. 43	92. 29. 58	91. 4. 32	89. 39. 22
30		82. 37. 6	81. 13. 21	79. 49. 48	78. 26. 27
31		71. 32. 18	70. 9. 54	68. 47. 39	67. 25. 34

JULY 1774.

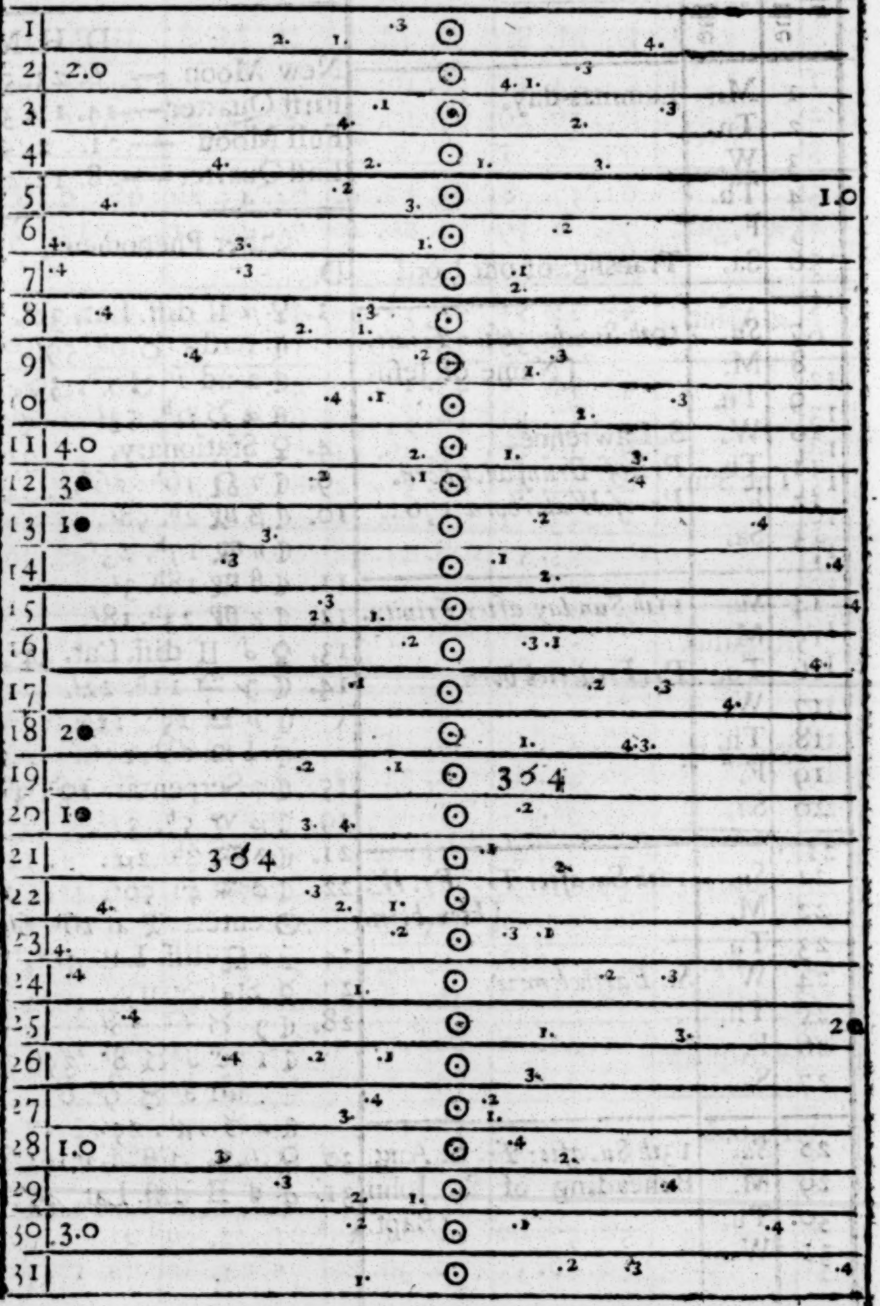
Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Fomalhaut.	49. 25. 57	50. 47. 43	52. 9. 43	53. 31. 51
2		60. 24. 48	61. 47. 40	63. 10. 34	64. 33. 31
3		71. 28. 22	72. 51. 19	74. 14. 15	75. 37. 9
4	α Pegaſi.	67. 29. 51	68. 53. 6	70. 16. 22	71. 39. 40
5		78. 36. 27	79. 59. 50	81. 23. 13	82. 46. 36
6	α Arietis.	46. 6. 21	47. 30. 6	48. 54. 4	50. 18. 14
7		57. 21. 38			
12	The Sun.	40. 12. 42	41. 37. 44	43. 2. 59	44. 28. 26
13		51. 38. 57	53. 5. 44	54. 32. 45	56. 0. 1
14		63. 20. 5	64. 48. 53	66. 17. 58	67. 47. 19
15		75. 18. 19	76. 49. 26	78. 20. 52	79. 52. 37
16		87. 36. 5	89. 9. 48	90. 43. 52	92. 18. 16
17		100. 15. 29	101. 52. 2	103. 28. 57	105. 6. 13
18		113. 17. 47	114. 57. 10	116. 36. 54	118. 17. 0
16	Regulus.	54. 49. 10	56. 30. 12	58. 11. 35	59. 53. 17
17		68. 27. 3	70. 10. 53	71. 55. 6	73. 39. 41
18	Spica ♍	29. 13. 37	30. 58. 43	32. 44. 22	34. 30. 31
19		43. 27. 49	45. 16. 27	47. 5. 28	48. 54. 50
20		58. 6. 16	59. 57. 24	61. 48. 47	63. 40. 24
21		73. 1. 10			
21	Antares.	28. 24. 21	30. 10. 46	31. 57. 51	33. 45. 33
22		42. 50. 59	44. 40. 57	46. 31. 4	48. 21. 20
23		57. 32. 57	59. 23. 8	61. 13. 11	63. 3. 6
24		72. 9. 34			
24	β Capricorni.	17. 45. 6	19. 35. 12	21. 24. 58	23. 14. 24
25		32. 16. 17	34. 3. 33	35. 50. 24	37. 36. 51
26		46. 22. 39			
26	α Aquilæ.	54. 52. 7	56. 20. 42	57. 49. 24	59. 18. 13
27		66. 42. 52	68. 11. 38	69. 40. 16	71. 8. 46
28		78. 28. 23			
28	Fomalhaut.	45. 51. 4	47. 14. 2	48. 37. 18	50. 0. 50
29		57. 1. 15	58. 25. 37	59. 50. 0	61. 14. 25
30		68. 15. 46	69. 39. 52	71. 3. 54	72. 27. 52
31	α Pegaſi.	64. 32. 18	65. 55. 58	67. 19. 36	68. 43. 15
A. 1		75. 41. 7			

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Fomalhaut.	54. 54. 11	56. 16. 40	57. 39. 17	59. 2. 0
2		65. 56. 29	67. 19. 27	68. 42. 26	70. 5. 24
3		77. 0. 1			
3	α Pegaſi.	61. 57. 8	63. 20. 16	64. 43. 26	66. 6. 38
4		73. 2. 59	74. 26. 20	75. 49. 41	77. 13. 4
5		84. 9. 59			
5	α Arietis.	40. 33. 51	41. 56. 34	43. 19. 34	44. 42. 50
6		51. 42. 36	53. 7. 8	54. 31. 50	55. 56. 40
12	The Sun.	45. 54. 6	47. 19. 59	48. 46. 5	50. 12. 24
13		57. 27. 31	58. 55. 16	60. 23. 17	61. 51. 33
14		69. 16. 57	70. 46. 51	72. 17. 2	73. 47. 31
15		81. 24. 41	82. 57. 2	84. 29. 43	86. 2. 44
16		93. 53. 1	95. 28. 6	97. 3. 32	98. 39. 19
17		106. 43. 51	108. 21. 48	110. 0. 6	111. 38. 46
18		119. 57. 27			
16	Regulus.	61. 35. 20	63. 17. 44	65. 0. 29	66. 43. 35
17		75. 24. 39			
17	Spica ♍	22. 19. 6	24. 1. 47	25. 45. 7	27. 29. 4
18		36. 17. 9	38. 4. 12	39. 51. 40	41. 39. 33
19		50. 44. 31	52. 34. 31	54. 24. 49	56. 15. 24
20		65. 32. 12	67. 24. 12	69. 16. 22	71. 8. 41
21	Antares.	35. 33. 48	37. 22. 32	39. 11. 41	41. 1. 12
22		50. 11. 40	52. 2. 0	53. 52. 21	55. 42. 41
23		64. 52. 51	66. 42. 24	68. 31. 43	70. 20. 47
24	β Capricorni.	25. 3. 30	26. 52. 15	28. 40. 38	30. 28. 39
25		39. 22. 53	41. 8. 30	42. 53. 40	44. 38. 23
26	α Aquilæ.	60. 47. 8	62. 16. 5	63. 45. 3	65. 13. 59
27		72. 37. 7	74. 5. 16	75. 33. 13	77. 0. 56
28	Fomalhaut.	51. 24. 36	52. 48. 34	54. 12. 40	55. 36. 54
29		62. 38. 48	64. 3. 6	65. 27. 23	66. 51. 36
30		73. 51 45			
30	α Pegaſi.	58. 57. 42	60. 21. 20	61. 44. 59	63. 8. 38
31		70. 6. 55	71. 30. 29	72. 54. 2	74. 17. 35

Configurations of the SATELLITES of JUPITER at 2 o' th' Clock in the Morning.



AUGUST 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	M.	Lammas-day.
2	Tu.	
3	W.	
4	Th.	
5	F.	
6	Sa.	Transfig. of our Lord.
7	*Su.*	*10th Sunday after Trinity.*
8	M.	[Name of Jeſus.
9	Tu.	
10	W.	S. Lawrence.
11	Th.	*Prs. of Brunſwick born.*
12	F.	*Pr. of Wales born* 1762.
13	Sa.	
14	*Su.*	*11th Sunday after Trinity.*
15	M.	
16	Tu.	*Pr. Frederick born.*
17	W.	
18	Th.	
19	F.	
20	Sa.	
21	*Su.*	*12th Su. after Tr. Pr. W.*
22	M.	*[Hen. born.*
23	Tu.	
24	W.	*St. Bartholomew.*
25	Th.	
26	F.	
27	Sa.	
28	*Su.*	*13th Su. after Tr.* S. Aug.
29	M.	Beheading of St. John
30	Tu.	[Bapt.
31	W.	

Phaſes of the Moon.

	D. H. M.
New Moon —	6. 23. 56
Firſt Quarter —	14. 11. 35
Full Moon —	21. 2. 51
Laſt Quarter —	28. 12. 26

Other Phenomena.

D.	
1.	♀ *μ* ♊ diff. Lat. 32′.
	☾ 1 ad δ ♉ 0^h. 59′.
	☾ 2 ad δ ♉ 1^h. 30′.
	☾ *α* ♉ 6^h. 53′.
4.	☿ Stationary.
9.	☾ *τ* ♌ 16^h. 26′.
10.	☾ *β* ♍ 2^h. 58′.
	☾ *η* ♍ 17^h. 23′.
11.	☾ *θ* ♍ 18^h. 3′.
12.	☾ *κ* ♍ 23^h. 18′.
13.	♀ δ ♊ diff. Lat. 34′.
14.	☾ *γ* ♎ 11^h. 22′.
	☾ *η* ♎ 15^h. 12′.
	☾ ♆ ♎ 20^h. 22′.
15.	☾ *φ* Serpentar. 10^h. 9′.
19.	☾ *β* ♑ 5^h. 31′.
21.	☾ *λ* ♒ 7^h. 29′.
22.	☾ *φ* ♒ 4^h. 56′.
	☉ enters ♍ at 16^h. 6′.
24.	☿ *ο* ♌ diff. Lat. 56′.
27.	☿ Stationary.
28.	☾ *γ* ♉ 6^h. 28′.
	☾ 1 ad δ ♉ 8^h. 35′.
	☾ 2 ad δ ♉ 9^h. 6′.
	☾ *α* ♉ 14^h. 25′.
30.	♀ δ ♋ diff. Lat. 6′.
31.	♂ δ ♊ diff. Lat. 49′.

AUGUST 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Afc. in Time.	Sun's Declin. North.	Equat. of Time. Add.	Diff.
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	M.	4. 9. 10. 17	8.46.26,8	17. 58. 54	5. 51,5	3,8
2	Tu.	4. 10. 7. 45	8.50.19,5	17. 43. 34	5. 47,7	4,4
3	W.	4. 11. 5. 15	8.54.11,8	17. 27. 56	5. 43,3	4,9
4	Th.	4. 12. 2. 46	8.58. 3,3	17. 12. 0	5. 38,4	5,5
5	F.	4. 13. 0. 19	9. 1.54,4	16. 55. 48	5. 32,9	6,1
6	Sa.	4. 13. 57. 52	9. 5.44,8	16. 39. 20	5. 26,8	6,7
7	*Su.*	4. 14. 55. 27	9. 9.34,6	16. 22. 35	5. 20,1	7,3
8	M.	4. 15. 53. 3	9.13.23,9	16. 5. 35	5. 12,8	7,9
9	Tu.	4. 16. 50. 39	9.17.12,5	15. 48. 19	5. 4,9	8,5
10	W.	4. 17. 48. 17	9.21. 0,6	15. 30. 47	4. 56,4	9,0
11	Th.	4. 18. 45. 56	9.24.48,1	15. 13. 1	4. 47,4	9,6
12	F.	4. 19. 43. 36	9.28.35,0	14. 55. 0	4. 37,8	10,2
13	Sa.	4. 20. 41. 17	9.32.21,3	14. 36. 45	4. 27,6	10,8
14	*Su.*	4. 21. 38. 58	9.36. 7,1	14. 18. 17	4. 16,8	11,3
15	M.	4. 22. 36. 41	9.39.52,3	13. 59. 35	4. 5,5	11,8
16	Tu.	4. 23. 34. 24	9.43.37,0	13. 40. 38	3. 53,7	12,4
17	W.	4. 24. 32. 9	9.47.21,1	13. 21. 29	3. 41,3	13,0
18	Th.	4. 25. 29. 55	9.51. 4,7	13. 2. 8	3. 28,3	13,4
19	F.	4. 26. 27. 42	9.54.47,8	12. 42. 34	3. 14,9	13,9
20	Sa.	4. 27. 25. 30	9.58.30,4	12. 22. 48	3. 1,0	14,4
21	*Su.*	4. 28. 23. 19	10. 2.12,5	12. 2. 51	2. 46,6	14,9
22	M.	4. 29. 21. 10	10. 5.54,1	11. 42. 42	2. 31,7	15,3
23	Tu.	5. 0. 19. 3	10. 9.35,3	11. 22. 22	2. 16,4	15,7
24	W.	5. 1. 16. 57	10.13.16,1	11. 1. 50	2. 0,7	16,1
25	Th.	5. 2. 14. 53	10.16.56,5	10. 41. 9	1. 44,6	16,6
26	F.	5. 3. 12. 50	10.20.36,5	10. 20. 17	1. 28,0	16,9
27	Sa.	5. 4. 10. 50	10.24.16,1	9. 59. 15	1. 11,1	17,2
28	*Su.*	5. 5. 8. 51	10.27.55,4	9. 38. 3	0. 53,9	17,5
29	M.	5. 6. 6. 55	10.31.34,3	9. 16. 42	0. 36,4	17,9
30	Tu.	5. 7. 5. 0	10.35.12,9	8. 55. 13	0. 18,5	18,2
31	W.	5. 8. 3. 8	10.38.51,3	8. 33. 34	0. 0,3	

AUGUST 1774.

Days.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	15. 49,0	1. 6,5	2. 23,6	0. 006238	5. 14. 50
7	15. 49,9	1. 6,0	2. 23,9	0. 005846	5. 14. 31
13	15. 51,0	1. 5,5	2. 24,3	0. 005368	5. 14. 12
19	15. 52,2	1. 5,1	2. 24,6	0. 004828	5. 13. 53
25	15. 53,3	1. 4,7	2. 25,0	0. 004256	5. 13. 34

Eclipſes of the SATELLITES of JUPITER.

I. Satellite. Immerſions.		II. Satellite.			III. Satellite.		
Days	H. M. S.	Days	H. M. S.		Days	H. M. S.	
2	16. 52. 55	4	4. 37. 48	I	1	21. 14. 51	I
4	11. 21. 28	4	6. 55. 52	E	1	22. 53. 53	E
6	5. 50. 5	7	17. 56. 40	I	9	1. 16. 14	I
8	0. 18. 45	7	20. 14. 41	E	9	2. 54. 27	E
9	18. 47. 23	11	7. 15. 37	I	16	5. 18. 4	I
11	13*16. 6	11	9. 33. 35	E	16	6. 55. 31	E
13	7. 44. 51	14	20. 34. 39	I	23	9. 20. 24	I
15	2. 13. 34	14	22. 52. 35	E	23	10*57. 4	E
16	20. 42. 23	18	9. 53. 54	I	30	13*22. 57	I
18	15*11. 12	21	23. 13. 19	I	30	14*59. 2	E
20	9. 40. 0	25	12*32. 39	I	IV. Satellite. Conj.		
22	4. 8. 53	29	1. 52. 14	I			
23	22. 37. 48						
25	17. 6. 40				4	2. 33. 3	Sup.
27	11*35. 37				12	11*40. 37	Inf.
29	6. 4. 34				20	20. 48. 58	Sup.
31	0. 33. 33				29	5. 58. 3	Inf.

AUGUST 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Passage over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
MERCURY. Inf. ☌ 18^{d}. 4^{h}.						
1	9. 0. 25	4. 55 S	5. 2. 53	3. 10 S	7. 30 N	1. 28
7	9. 17. 51	6. 11	5. 3. 2	4. 14	6. 27	1. 4
13	10. 6. 58	6. 54	5. 0. 3	4. 44	7. 2	0. 29
19	10. 28. 48	6. 49	4. 25. 0	4. 16	9. 11	23. 43
25	11. 24. 39	5. 27	4. 21. 0	2. 48	11. 51	23. 8
VENUS.						
1	1. 1. 28	2. 19 S	3. 1. 10	1. 26 S	22. 1 N	21. 20
7	1. 11. 4	1. 52	3. 8. 10	1. 7	22. 6	21. 27
13	1. 20. 42	1. 23	3. 15. 12	0. 48	21. 48	21. 34
19	2. 0. 20	0. 50	3. 22. 17	0. 28	21. 10	21. 42
25	2. 9. 59	0. 16	3. 29. 25	0. 9	20. 9	21. 51
MARS.						
1	1. 28. 11	0. 19 N	2. 25. 49	0. 14 N	23. 38 N	20. 55
7	2. 1. 23	0. 25	2. 29. 48	0. 19	23. 47	20. 49
13	2. 4. 34	0. 31	3. 3. 45	0. 23	23. 48	20. 43
19	2. 7. 42	0. 37	3. 7. 39	0. 28	23. 43	20. 38
25	2. 10. 49	0. 43	3. 11. 30	0. 32	23. 30	20. 32
JUPITER, □ 6^{d}. 21^{h}.						
1	1. 2. 31	1. 12 S	1. 14. 15	1. 12 S	14. 59 N	18. 0
7	1. 3. 3	1. 12	1. 14. 50	1. 14	15. 8	17. 39
13	1. 3. 36	1. 12	1. 15. 19	1. 15	15. 15	17. 18
19	1. 4. 9	1. 11	1. 15. 41	1. 16	15. 20	16. 57
25	1. 4. 42	1. 11	1. 15. 57	1. 17	15. 24	16. 36
SATURN.						
1	5. 27. 36	2. 17 N	5. 23. 20	2. 8 N	4. 36 N	2. 52
7	5. 27. 49	2. 18	5. 23. 57	2. 7	4. 21	2. 31
13	5. 28. 1	2. 18	5. 24. 36	2. 7	4. 5	2. 11
19	5. 28. 13	2. 18	5. 25. 16	2. 6	3. 49	1. 51
25	5. 28. 25	2. 18	5. 25. 58	2. 6	3. 32	1. 31

AUGUST 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M.S.
1	M.	2. 3. 12. 43	2. 9. 10. 19	5. 6. 27 S	5.10.35 S
2	Tu.	2. 15. 6. 45	2. 21. 2. 40	5. 11. 23	5. 8.50
3	W.	2. 26. 58. 22	3. 2. 54. 17	5. 3. 0	4.53.53
4	Th.	3. 8. 50. 48	3. 14. 48. 11	4. 41. 36	4.26.10
5	F.	3. 20. 46. 41	3. 26. 46. 43	4. 7. 50	3.46.39
6	Sa.	4. 2. 48. 20	4. 8. 51. 45	3. 22. 52	2.56.38
7	*Su.*	4. 14. 57. 19	4 21. 5. 3	2. 28. 12	1.57.54
8	M.	4. 27. 15. 6	5. 3. 27. 45	1. 25. 57	0.52.47 S
9	Tu.	5. 9. 43. 4	5. 16. 1. 14	0. 18. 40 S	0.15.57 N
10	W.	5. 22. 22. 29	5. 28. 46. 58	0. 50. 40 N	1.25. 5
11	Th.	6. 5. 14. 51	6. 11. 46. 23	1. 58. 46	2.31. 7
12	F.	6. 18. 21. 45	6. 25. 1. 6	3. 1. 54	3.30.30
13	Sa.	7. 1. 44. 39	7. 8. 32. 25	3. 56. 31	4.19.31
14	*Su.*	7. 15. 24. 38	7. 22. 21. 13	4. 39. 3	4.54.45
15	M.	7. 29. 22. 13	8. 6. 27. 25	5. 6. 12	5.13. 8
16	Tu.	8. 13. 36. 38	8. 20. 49. 38	5. 15. 17	5.12.32
17	W.	8. 28. 5. 47	9. 5. 24. 44	5. 4. 45	4.52. 0
18	Th.	9. 12. 45. 41	9. 20. 7. 57	4. 34. 22	4.12.10
19	F.	9. 27. 30. 38	10. 4. 52. 54	3. 45. 44	3.15.33
20	Sa.	10. 12. 13. 47	10. 19. 32. 24	2. 42. 13	2. 6.20
21	*Su.*	10. 26. 47. 55	11. 3. 59. 34	1. 28. 38	0.49.53 N
22	M.	11. 11. 6. 36	11. 18. 8. 30	0. 10. 39 N	0.28.13 S
23	Tu.	11. 25. 4. 59	0. 1. 55. 34	1. 6. 14 S	1.42.44
24	W.	0. 8. 40. 15	0. 15. 19. 1	2. 17. 16	2.49.28
25	Th.	0. 21. 51. 51	0. 28. 19. 8	3. 18. 54	3.45.22
26	F.	1. 4. 41. 3	1. 10. 58. 2	4. 8. 42	4.28.42
27	Sa.	1. 17. 10. 28	1. 23. 19. 0	4. 45. 16	4.58.25
28	*Su.*	1. 29. 23. 56	2. 5. 25. 58	5. 8. 3	5.14.15
29	M.	2. 11. 25. 36	2. 17. 23. 29	5. 16. 51	5.16. 5
30	Tu.	2. 23. 20. 11	2. 29. 16. 13	5. 11. 57	5. 4.28
31	W.	3. 5. 12. 5	3. 11. 8. 26	4. 53. 46	4.39 52

AUGUST 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſc. at Midn.	☽'s Declinat. at Noon.	☽'s Declin. at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	M.	25	20. 0	62. 11	68. 18	15. 48 N	16. 44 N
2	Tu.	26	20. 47	74. 26	80. 37	17. 29	18. 2
3	W.	27	21. 34	86. 49	93. 3	18. 23	18. 32
4	Th.	28	22. 22	99. 18	105. 33	18. 29	18. 14
5	F.	29	23. 10	111. 49	118. 4	17. 46	17. 7
6	Sa.	1	23. 57	124. 17	130. 30	16. 16	15. 13
7	*Su.*	2	☌	136. 41	142. 50	14. 0	12. 38
8	M.	3	0. 44	148. 58	155. 4	11. 6	9. 26
9	Tu.	4	1. 30	161. 9	167. 14	7. 39	5. 46
10	W.	5	2. 17	173. 20	179. 27	3. 48 N	1. 47 N
11	Th.	6	3. 3	185. 36	191. 49	0. 16 S	2. 20 S
12	F.	7	3. 51	198. 6	204. 28	4. 24	6. 26
13	Sa.	8	4. 41	210. 57	217. 34	8. 24	10. 16
14	*Su.*	9	5. 33	224. 19	231. 14	12. 1	13. 38
15	M.	10	6. 28	238. 18	245. 31	15. 3	16. 16
16	Tu.	11	7. 25	252. 53	260. 24	17. 15	17. 57
17	W.	12	8. 25	268. 0	275. 41	18. 22	18. 30
18	Th.	13	9. 25	283. 25	291. 8	18. 18	17. 48
19	F.	14	10. 25	298. 49	306. 25	16. 59	15. 54
20	Sa.	15	11. 23	313. 55	321. 17	14. 33	12. 59
21	*Su.*	16	12. 19	328. 31	335. 35	11. 12	9. 17
22	M.	17	13. 12	342. 30	349. 17	7. 15	5. 8
23	Tu.	18	14. 2	355. 56	2. 27	2. 58 S	0. 48 S
24	W.	19	14. 51	8. 52	15. 12	1. 20 N	3. 25 N
25	Th.	20	15. 39	21. 27	27. 39	5. 27	7. 23
26	F.	21	16. 26	33. 49	39. 57	9. 11	10. 52
27	Sa.	22	17. 13	46. 5	52. 12	12. 25	13. 48
28	*Su.*	23	18. 0	58. 20	64. 28	15. 2	16. 5
29	M.	24	18. 47	70. 38	76. 49	16. 57	17. 37
30	Tu.	25	19. 34	83. 1	89. 14	18. 6	18. 23
31	W.	26	20, 22	95. 28	101. 42	18. 28	18. 21

AUGUST 1774.

Days of the Month.	Days of the Week.	Semidr. ☽ at Noon.	Semidr. ☽ at Midnight.	Hor. Par. ☽ at Noon.	Hor. Par. ☽ at Midnight.	Proport. Logar. at Noon.	Proport. Logar. at Midn.
		M. S.	M. S.	M. S.	M. S.		
1	M.	14. 51	14. 48	54. 28	54. 20	5191	5202
2	Tu.	14. 47	14. 46	54. 15	54. 12	5209	5213
3	W.	14. 46	14. 46	54. 10	54. 11	5215	5214
4	Th.	14. 47	14. 48	54. 14	54. 18	5210	5205
5	F.	14. 49	14. 51	54. 24	54. 32	5197	5186
6	Sa.	14. 54	14. 56	54. 40	54. 50	5175	5162
7	*Su.*	14. 59	15. 2	55. 0	55. 12	5149	5133
8	M.	15. 6	15. 9	55. 24	55. 37	5118	5100
9	Tu.	15. 13	15. 19	55. 51	56. 5	5082	5064
10	W.	15. 21	15. 25	56. 20	56. 36	5045	5025
11	Th.	15. 30	15. 34	56. 52	57. 9	5004	4983
12	F.	15. 39	15. 43	57. 25	57. 42	4962	4941
13	Sa.	15. 48	15. 53	58. 0	58. 18	4918	4896
14	*Su.*	15. 58	16. 3	58. 36	58. 54	4874	4852
15	M.	16. 8	16. 12	59. 11	59. 27	4831	4811
16	Tu.	16. 16	16. 20	59. 42	59. 57	4793	4775
17	W.	16. 23	16. 26	60. 9	60. 19	4760	4748
18	Th.	16. 28	16. 29	60. 26	60. 30	4740	4735
19	F.	16. 29	16. 29	60. 31	60. 28	4734	4737
20	Sa.	16. 27	16. 24	60. 22	60. 12	4745	4757
21	*Su.*	16. 21	16. 16	59. 59	59. 43	4772	4792
22	M.	16. 11	16. 5	59. 23	59. 2	4816	4842
23	Tu.	15. 59	15. 52	58. 38	58. 14	4871	4901
24	W.	15. 45	15. 38	57. 48	57. 22	4933	4966
25	Th.	15. 31	15. 24	56. 57	56. 33	4998	5028
26	F.	15. 18	15. 12	56. 10	55. 48	5058	5086
27	Sa.	15. 7	15. 2	55. 29	55. 11	5111	5134
28	*Su.*	14. 58	14. 55	54. 57	54. 44	5153	5170
29	M.	14. 52	14. 50	54. 34	54. 27	5183	5193
30	Tu.	14. 49	14. 48	54. 23	54. 19	5198	5203
31	W.	14. 48	14. 49	54. 20	54. 23	5202	5198

AUGUST 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	The Sun.	66. 3. 39	64. 41. 46	63. 19. 58	61. 58. 16
2		55. 10. 51	53. 49. 30	52. 28. 11	51. 6. 54
3		44. 20. 37	42. 59. 21	41. 38. 3	40. 16. 43
9	Spica ♍	41. 0. 9	39. 26. 26	37. 52. 37	36. 18. 40
10		28. 27. 41	26. 53. 21	25. 19. 3	23. 44. 49
11		15. 57. 26			
11	Antares.	61. 39. 53	60. 3. 56	58. 27. 49	56. 51. 34
12		48. 48. 22	47. 11. 24	45. 34. 21	43. 57. 14
13		35. 51. 30	34. 14. 32	32. 37. 45	31. 1. 13
14	α Aquilæ.	73. 4. 37	71. 32. 20	70. 0. 4	68. 27. 49
15		60. 47. 46	59. 16. 16	57. 45. 2	56. 14. 8
16		48. 46. 43			
16	β Capricorni.	47. 6. 42	45. 19. 15	43. 31. 35	41. 43. 44
17		32. 41. 25	30. 52. 22	29. 3. 10	27. 13. 48
18		18. 5. 2			
18	α Pegaſi.	67. 21. 44	65. 39. 27	63. 57. 16	62. 15. 16
19		53. 49. 26	52. 9. 26	50. 29. 58	48. 51. 6
20		40. 48. 52	39. 15. 34	37. 43. 40	36. 13. 19
21	ι Arietis.	67. 47. 59	66. 3. 8	64. 18. 38	62. 34. 30
22		54. 0. 13	52. 18. 48	50. 37. 58	48. 57. 44
23		40. 46. 26			
23	Aldebaran.	71. 32. 9	69. 48. 33	68. 5. 21	66. 22. 31
24		57. 54. 11	56. 13. 41	54. 33. 34	52. 53. 51
25		44. 41. 9	43. 3. 45	41. 26. 42	39. 50. 2
26		31. 52. 0	30. 17. 25	28. 43. 9	27. 9. 12
27		19. 24. 0			
27	Pollux.	63. 50. 43	62. 20. 33	60. 50. 42	59. 21. 11
28		51. 58. 9	50. 30. 25	49. 2. 58	47. 35. 50
26	The Sun.	118. 26. 54	116. 59. 33	115. 32. 31	114. 5. 48
27		106. 56. 45	105. 31. 45	104. 7. 0	102. 42. 30
28		95. 43. 32	94. 20. 21	92. 57. 21	91. 34. 31
29		84. 42. 40	83. 20. 40	81. 58. 46	80. 36. 57
30		73. 48. 56	72. 27. 28	71. 6. 2	69. 44. 36
31		62. 57. 29	61. 35. 58	60. 14. 23	58. 52. 45
S. 1		52. 3. 25			

AUGUST 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	The Sun.	60. 36. 39	59. 15. 7	57. 53. 38	56. 32. 13
2		49. 45. 38	48. 24. 23	47. 3. 7	45. 41. 52
3		38. 55. 22			
8	Spica ♍	47. 13. 45	45. 40. 33	44. 7. 12	42. 33. 44
9		34. 44. 37	33. 10. 29	31. 36. 17	30. 2. 0
10		22. 10. 43	20. 36. 48	19. 3. 12	17. 30. 2
11	Antares.	55. 15. 10	53. 38. 38	52. 1. 59	50. 25. 13
12		42. 20. 5	40. 42. 54	39. 5. 43	37. 28. 34
13		29. 24. 59			
13	α Aquilæ.	79. 13. 4	77. 41. 6	76. 9. 0	74. 36. 51
14		66. 55. 36	65. 23. 27	63. 51. 24	62. 19. 29
15		54. 43. 37	53. 13. 32	51. 43. 59	50. 15. 1
16	β Capricorni.	39. 55. 39	38. 7. 23	36. 18. 55	34. 30. 15
17		25. 24. 17	23. 34. 38	21. 44. 52	19. 55. 0
18	α Pegaſi.	60. 33. 28	58. 51. 57	57. 10. 45	55. 29. 53
19		47. 12. 55	45. 35. 29	43. 58. 56	42. 23. 21
20		34. 44. 41			
20	α Arietis.	74. 50. 17	73. 4. 19	71. 18. 36	69. 33. 9
21		60. 50. 45	59. 7. 25	57. 24. 32	55. 42. 8
22		47. 18. 5	45. 39. 6	44. 0. 49	42. 23. 15
23	Aldebaran.	64. 40. 5	62. 58. 1	61. 16. 21	59. 35. 4
24		51. 14. 31	49. 35. 36	47. 57. 4	46. 18. 55
25		38. 13. 43	36. 37. 46	35. 2. 10	33. 26. 55
26		25. 35. 34	24. 2. 14	22. 29. 12	20. 56. 27
27	Pollux.	57. 51. 58	56. 23. 4	54. 54. 28	53. 26. 10
28		46. 9. 1			
25	The Sun.			121. 22. 36	119. 54. 35
26		112. 39. 24	111. 13. 19	109. 47. 31	108. 22. 0
27		101. 18. 14	99. 54. 14	98. 30. 27	97. 6. 53
28		90. 11. 52	88. 49. 22	87. 27. 0	86. 4. 46
29		79. 15. 14	77. 53. 34	76. 31. 58	75. 10. 26
30		68. 23. 12	67. 1. 48	65. 40. 23	64. 18. 57
31		57. 31. 3	56. 9. 16	54. 47. 25	53. 25. 28

AUGUST 1774.

Diſtances of ☽'s Center from Stars, and from ☉ weſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	α Arietis.	32. 19. 4	33. 39. 4	34. 59. 34	36. 20. 32
2		43. 11. 19	44. 34. 24	45. 57. 44	47. 21. 19
3		54. 22. 10			
3	Aldebaran.	20. 15. 14	21. 43. 50	23. 12. 28	24. 41. 9
4		32. 5. 21	33. 34. 23	35. 3. 29	36. 32. 40
5		43. 59. 52	45. 29. 37	46. 59. 30	48. 29. 31
10	The Sun.				39. 1. 42
11		46. 30. 52	48. 1. 21	49. 32. 4	51. 3. 0
12		58. 41. 5	60. 13. 23	61. 45. 55	63. 18. 41
13		71. 6. 10	72. 40. 22	74. 14. 49	75. 49. 32
14		83. 46. 55	85. 23. 8	86. 59. 37	88. 36. 21
15		96. 43. 55	98. 22. 12	100. 0. 43	101. 39. 29
16		109. 56. 58	111. 37. 12	113. 17. 39	114. 58. 19
15	Spica ♍	39. 17. 26	41. 1. 53	42. 46. 39	44. 31. 44
16		53. 21. 29	55. 8. 17	56. 55. 19	58. 42. 36
17		67. 42. 21	69. 30. 57	71. 19. 43	73. 8. 40
18		82. 15. 41			
18	Antares.	37. 14. 15	39. 0. 18	40. 46. 43	42. 33. 29
19		51. 31. 12	53. 19. 17	55. 7. 28	56. 55. 43
20		65. 57. 26	67. 45. 41	69. 33. 51	71. 21. 54
21	β Capricorni.	26. 2. 37	27. 51. 14	29. 39. 36	31. 27. 43
22		40. 24. 13	42. 10. 36	43. 56. 39	45. 42. 22
23	α Aquilæ	61. 50. 23	63. 20. 56	64. 51. 30	66. 22. 3
24		73. 53. 41	75. 23. 34	76. 53. 15	78. 22. 44
25		85. 46. 13	87. 14. 4	88. 41. 36	90. 8. 49
26	α Pegaſi.	49. 32. 38	50. 57. 21	52. 22. 12	53. 47. 7
27		60. 52. 6	62. 17. 5	63. 42. 1	65. 6. 54
28		72. 10. 12	73. 34. 37	74. 58. 59	76. 23. 15
29	α Arietis.	39. 48. 11	41. 10. 55	42. 33. 54	43. 57. 9
30		50. 56. 22			
30	Aldebaran.	16. 37. 33	18. 6. 15	19. 34. 55	21. 3. 34
31		28. 26. 52	29. 55. 37	31. 24. 26	32. 53. 18
S. 1		40. 18. 49			

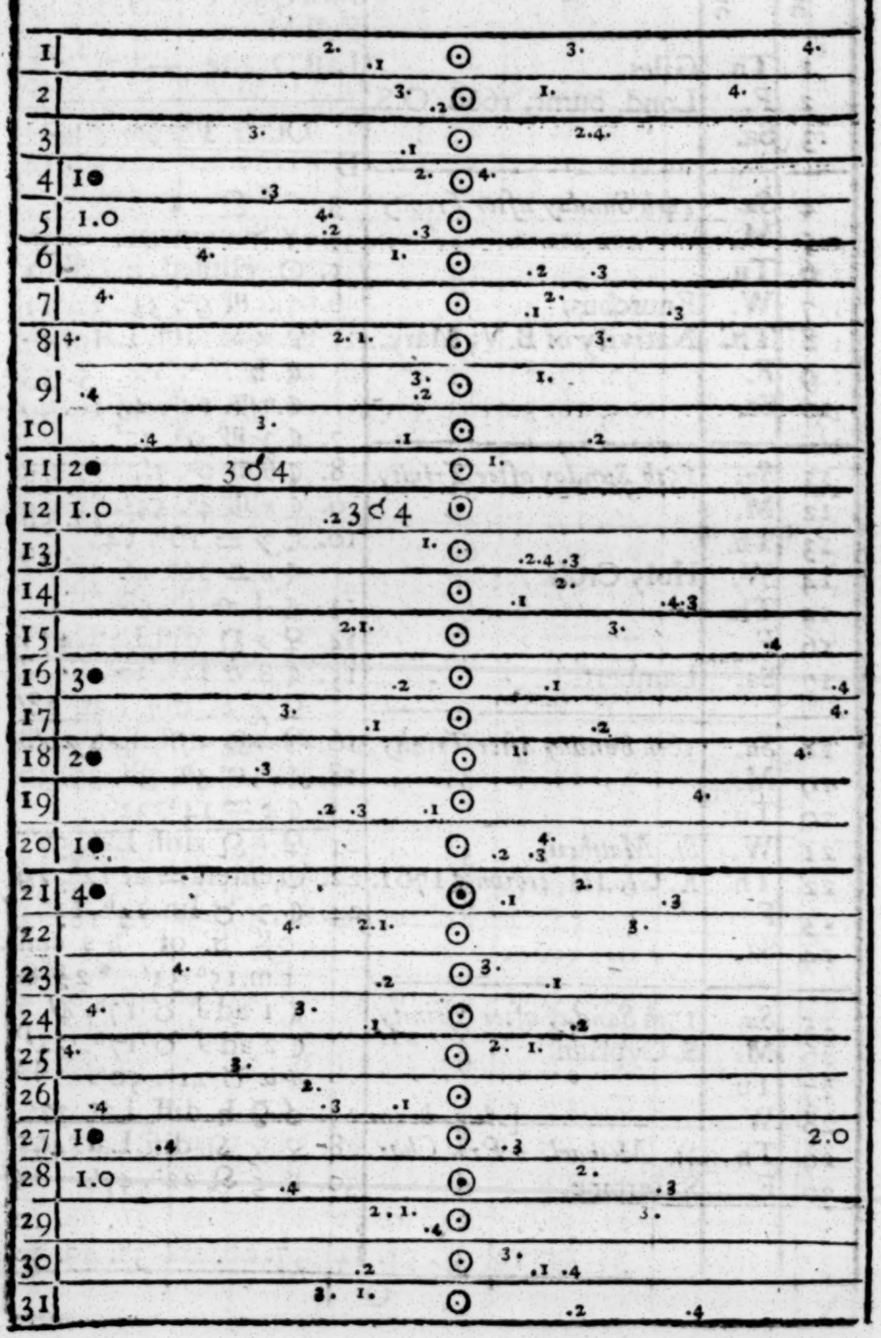
AUGUST 1774.

Diſtances of ☽'s Center from Stars, and from ☉ weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	α Arietis.	37. 41. 57	39. 3. 47	40. 25. 57	41. 48. 28
2		48. 45. 8	50. 9. 9	51. 33. 20	52. 57. 40
3	Aldebaran.	26. 9. 53	27. 38. 40	29. 7. 30	30. 36. 24
4		38. 1. 55	39. 31. 15	41. 0. 41	42. 30. 14
5		49. 59. 39			
10	The Sun.	40. 31. 6	42. 0. 43	43. 30. 33	45. 0. 36
11		52. 34. 10	54. 5. 33	55. 37. 10	57. 9. 1
12		64. 51. 42	66. 24. 57	67. 58. 27	69. 32. 11
13		77. 24. 29	78. 59. 42	80. 35. 11	82. 10. 55
14		90. 13. 21	91. 50. 36	93. 28. 7	95. 5. 53
15		103. 18. 30	104. 57. 45	106. 37. 15	108. 16. 59
16		116. 39. 12	118. 20. 17	120. 1. 34	
14	Spica ♍	32. 23. 2	34. 6. 6	35. 49. 32	37. 33. 18
15		46. 17. 7	48. 2. 47	49. 48. 44	51. 34. 58
16		60. 30. 8	62. 17. 52	64. 5. 49	65. 53. 59
17		74. 57. 48	76. 47. 4	78. 36. 28	80. 26. 1
18	Antares.	44. 20. 33	46. 7. 54	47. 55. 28	49. 43. 14
19		58. 44. 4	60. 32. 26	62. 20. 47	64. 9. 7
20		73. 9. 50			
20	β Capricorni.	18. 46. 14	20. 35. 36	22. 24. 47	24. 13. 48
21		33. 15. 36	35. 3. 12	36. 50. 30	38. 37. 30
22		47. 27. 44			
22	α Aquilæ.	55. 49. 23	57. 19. 23	58. 49. 35	60. 19. 55
23		67. 52. 36	69. 23. 4	70. 53. 23	72. 23. 36
24		79. 52. 0	81. 20. 58	82. 49. 39	84. 18. 4
25		91. 35. 43			
25	α Pegaſi.	43. 55. 46	45. 19. 35	46. 43. 42	48. 8. 4
26		55. 12. 6	56. 37. 6	58. 2. 6	59. 27. 6
27		66. 31. 44	67. 56. 28	69. 21. 7	70. 45. 42
28		77. 47. 27			
28	α Arietis.	34. 20. 41	35. 41. 57	37. 3. 40	38. 25. 45
29		45. 20. 39	46. 44. 21	48. 8. 12	49. 32. 13
30	Aldebaran.	22. 32. 12	24. 0. 50	25. 29. 29	26. 58. 10
31		34. 22. 14	35. 51. 14	37. 20. 20	38. 49. 32

AUGUST 1774.

Configurations of the SATELLITES of JUPITER at 12 o' th' Clock at Night.



SEPTEMBER 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	Th.	Giles.
2	F.	Lond. burnt, 1666, O.S.
3	Sa.	
4	*Su.*	*14th Sunday after Trinity.*
5	M.	
6	Tu.	
7	W.	Enurchus.
8	Th.	Nativity of B. V. Mary.
9	F.	
10	Sa.	
11	*Su.*	*15th Sunday after Trinity.*
12	M.	
13	Tu.	
14	W.	Holy Croſs.
15	Th.	
16	F.	
17	Sa.	Lambert.
18	*Su.*	*16th Sunday after Trinity.*
19	M.	
20	Tu.	
21	W.	*St. Matthew.*
22	Th.	*K. Geo.*III. *crown'd* 1761.
23	F.	
24	Sa.	
25	*Su.*	*17th Sunday after Trinity.*
26	M.	S. Cyprian.
27	Tu.	
28	W.	[*Aug. born.*
29	Th.	*St. Michael. Prs. Char.*
30	F.	S. Jerome.

Phaſes of the Moon.

	D. H. M.
New Moon —	5. 13. 59
Firſt Quarter—	12. 17. 27
Full Moon —	19. 13. 17
Laſt Quarter —	27. 7. 4

Other Phenomena.

D.

3. ☾ ζ ♌ 14^{h}. 16′.
4. ♃ Stationary.
5. ☉ eclipſed, inviſible.
6. ☾ β ♍ 9^{h}. 33′.
☿ α ♌ diff Lat. 14′.
☾ ♄ 16^{h}. 1′.
☾ η ♍ 23^{h}. 43′.
7. ☾ γ ♍ 9^{h}. 27′.
8. ☾ θ ♍ 0^{h}. 1′.
9. ☾ κ ♍ 4^{h}. 55′.
10. ☾ γ ♎ 16^{h}. 54′.
☾ η ♎ 20^{h}. 46.
11. ☾ ψ ♎ 1^{h}. 58′.
14. ♀ ν ♌ diff. Lat. 47′.
15. ☾ β ♑ 13^{h}. 30′.
☿ χ ♌ diff. Lat. 28′.
16. ♀ α ♌ diff. Lat. 26′.
18. ☾ λ ♒ 4^{h}. 58′.
☾ φ ♒ 14^{h}. 32′.
21. ♀ ρ ♌ diff. Lat. 57′.
22. ☉ enters ♎ at 12^{h}. 29′.
24. ☾ γ ♉ Im. 14^{h}. 11′. * $0\frac{1}{3}'$ S. of ☽'s cent.
Em. 15^{h}. 31′. * $2\frac{1}{4}'$ S.
☾ 1 ad δ ♉ 17^{h}. 4′.
☾ 2 ad δ ♉ 17^{h}. 34′.
☾ α ♉ 22^{h}. 50′.
25. ☌ ☿ ♄ diff Lat. 32′.
28. ♀ χ ♌ diff. Lat. 4′.
30. ☾ ξ ♌ 22^{h}. 47′.

SEPTEMBER 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Afc. in Time.	Sun's Declin. North.	Equat. of Time. Sub.	Diff.
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	Th.	5. 9. 1. 17	10. 42. 29,3	8. 11. 47	0. 18,3	18,7
2	F.	5. 9. 59. 29	10. 46. 7,0	7. 49. 51	0. 37,0	19,0
3	Sa.	5. 10. 57. 42	10. 49. 44,5	7. 27. 48	0. 56,0	19,2
4	*Su.*	5. 11. 55. 58	10. 53. 21,8	7. 5. 38	1. 15,2	19,5
5	M.	5. 12. 54. 15	10. 56. 58,8	6. 43. 21	1. 34,7	19,8
6	Tu.	5. 13. 52. 34	11. 0. 35,6	6. 20. 57	1. 54,5	19,9
7	W.	5. 14. 50. 55	11. 4. 12,1	5. 58. 27	2. 14,4	20,1
8	Th.	5. 15. 49. 18	11. 7. 48,5	5. 35. 50	2. 34,5	20,3
9	F.	5. 16. 47. 42	11. 11. 24,8	5. 13. 8	2. 54,8	20,4
10	Sa.	5. 17. 46. 8	11. 15. 0,9	4. 50. 21	3. 15,2	20,6
11	*Su.*	5. 18. 44. 36	11. 18. 36,8	4. 27. 29	3. 35,8	20,7
12	M.	5. 19. 43. 5	11. 22. 12,6	4. 4. 33	3. 56,5	20,9
13	Tu.	5. 20. 41. 35	11. 25. 48,2	3. 41. 33	4. 17,4	20,9
14	W.	5. 21. 40. 7	11. 29. 23,7	3. 18. 28	4. 38,3	21,0
15	Th.	5. 22. 38. 41	11. 32. 59,3	2. 55. 20	4. 59,3	21,0
16	F.	5. 23. 37. 16	11. 36. 34,8	2. 32. 8	5. 20,3	21,1
17	Sa.	5. 24. 35. 53	11. 40. 10,3	2. 8. 54	5. 41,4	21,0
18	*Su.*	5. 25. 34. 32	11. 43. 45,8	1. 45. 37	6. 2,4	21,1
19	M.	5. 26. 33. 12	11. 47. 21,1	1. 22. 18	6. 23,5	21,0
20	Tu.	5. 27. 31. 54	11. 50. 56,5	0. 58. 58	6. 44,5	20,9
21	W.	5. 28. 30. 39	11. 54. 32,1	0. 35. 35	7. 5,4	20,8
22	Th.	5. 29. 29. 25	11. 58. 7,8	0. 12. 11	7. 26,2	20,7
				South.		
23	F.	6. 0. 28. 14	12. 1. 43,6	0. 11. 15	7. 46,9	20,6
24	Sa.	6. 1. 27. 5	12. 5. 19,6	0. 34. 41	8. 7,5	20,4
25	*Su.*	6. 2. 25. 59	12. 8. 55,7	0. 58. 7	8. 27,9	20,2
26	M.	6. 3. 24. 54	12. 12. 31,9	1. 21. 33	8. 48,1	20,0
27	Tu.	6. 4. 23. 51	12. 16. 8,4	1. 44. 59	9. 8,1	19,7
28	W.	6. 5. 22. 51	12. 19. 45,2	2. 8. 24	9. 27,8	19,5
29	Th.	6. 6. 21. 55	12. 23. 22,2	2. 31. 49	9. 47,3	19,2
30	F.	6. 7. 20. 59	12. 26. 59,4	2. 55. 12	10. 6,5	18,9

Days of the Month.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	15. 55,0	1. 4,3	2. 25,4	0. 003551	5. 13. 12
7	15. 56,5	1. 4,1	2. 25,8	0. 002894	5. 12. 53
13	15. 58,0	1. 4,0	2. 26,3	0. 002178	5. 12. 33
19	15. 59,5	1. 4,0	2. 26,7	0. 001439	5. 12. 14
25	16. 1,2	1. 4,1	2. 27,3	0. 000706	5. 11. 55

Eclipſes of the SATELLITES of JUPITER.

I. Satellite. Immerſions.

Days	H. M. S.
1	19. 2. 28
3	13*31. 26
5	8. 0. 27
7	2. 29. 28
8	20. 58. 33
10	15*27. 34
12	9*56. 38
14	4. 25. 38
15	22. 54. 45
17	17. 23. 47
19	11*52. 51
21	6. 21. 55
23	0. 50. 57
24	19. 19. 59
26	13*49. 4
28	8*18. 7
30	2. 47. 8

II. Satellite. Immerſions.

Days	H. M. S.
1	15*11. 57
5	4. 31. 49
8	17. 51. 40
12	7. 11. 30
15	20. 31. 22
19	9*51. 19
22	23. 11. 20
26	12*31. 18
30	1. 51. 15

III. Satellite.

Days	H. M. S.	
6	17. 25. 28	I
6	19. 1. 27	E
13	21. 28. 30	I
13	23. 3. 53	E
21	1. 31. 34	I
21	3. 6. 23	E
28	5. 34. 39	I
28	7. 8. 51	E

IV. Satellite. Conjunctions.

6	15* 7	Sup.
15	0. 17	Inf.
23	9*27	Sup.

SEPTEMBER 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſage over Merid
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
MERCURY. Gr. El. 4^d. ſup. ☌ 30^d. 1$\frac{1}{2}$^{h}.						
1	1. 1. 17	1. 46 S	4. 21. 36	0. 40 S	13. 41 N	22. 53
7	2. 7. 47	2. 38 N	4. 27. 22	0. 48 N	13. 9	22. 56
13	3. 15. 16	6. 2	5. 6. 34	1. 37	10. 36	23. 13
19	4. 19. 9	6. 59	5. 17. 22	1. 50	6. 42	23. 32
25	5. 17. 27	5. 58	5. 28. 23	1. 38	2. 8	23. 50
VENUS.						
1	2. 21. 17	0. 24 N	4. 7. 49	0. 13 N	18. 32 N	22. 0
7	3. 0. 58	0. 58	4. 15. 4	0. 30	16. 49	22. 8
13	3. 10. 41	1. 30	4. 22. 20	0. 45	14. 48	22. 16
19	3. 20. 25	1. 59	4. 29. 39	0. 59	12. 33	22. 23
25	4. 0. 10	2. 25	5. 7. 0	1. 10	10. 3	22. 29
MARS.						
1	2. 14. 24	0. 49 N	3. 15. 56	0. 39 N	23. 10 N	20. 26
7	2. 17. 27	0. 54	3. 19. 41	0. 44	22. 45	20. 21
13	2. 20. 28	0. 59	3. 23. 23	0. 50	22. 16	20. 15
19	2. 23. 27	1. 4	3. 27. 1	0. 55	21. 41	20. 9
25	2. 26. 24	1. 9	4. 0. 36	1. 1	21. 2	20. 2
JUPITER.						
1	1. 5. 20	1. 11 S	1. 16. 6	1. 18 S	15. 26 N	16. 11
7	1. 5. 52	1. 10	1. 16. 5	1. 19	15. 24	15. 49
13	1. 6. 25	1. 10	1. 15. 59	1. 20	15. 22	15. 27
19	1. 6. 58	1. 9	1. 15. 45	1. 21	15. 17	15. 5
25	1. 7. 31	1. 9	1. 15. 24	1. 22	15. 10	14. 42
SATURN. ☌ 21^d. 20$\frac{3}{4}$^{h}.						
1	5. 28. 39	2. 18 N	5. 26. 48	2. 6 N	3. 12 N	1. 9
7	5. 28. 52	2. 19	5. 27. 32	2. 6	2. 54	0. 50
13	5. 29. 4	2. 19	5. 28. 16	2. 6	2. 37	0. 31
19	5. 29. 16	2. 19	5. 29. 0	2. 6	2. 20	0. 11
25	5. 29. 28	2. 19	5. 29. 45	2. 6	2. 2	23. 50

SEPTEMBER 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midnight.
		S. D. M. S.	S. D. M. S.	D. M. S.	D. M. S.
1	Th.	3. 17. 5. 44	3. 23. 4. 23	4. 22. 58 S	4. 3. 5 S
2	F.	3. 29. 4. 51	4. 5. 7. 31	3. 40. 28	3. 15. 15
3	Sa.	4. 11. 12. 41	4. 17. 20. 41	2. 47. 40	2. 17. 56
4	*Su.*	4. 23. 31. 47	4. 29. 46. 4	1. 46. 22	1. 13. 8
5	M.	5. 6. 3. 47	5. 12. 25. 4	0. 38. 45 S	0. 3. 36 S
6	Tu.	5. 18. 49. 53	5. 25. 18. 26	0. 31. 54 N	1. 7. 23 N
7	W.	6. 1. 50. 28	6. 8. 26. 8	1. 42. 16	2. 16. 7
8	Th.	6. 15. 5. 14	6. 21. 47. 48	2. 48. 25	3. 18. 40
9	F.	6. 28. 33. 30	7. 5. 22. 28	3. 46. 22	4. 11. 6
10	Sa.	7. 12. 14. 21	7. 19. 9. 4	4. 32. 25	4. 49. 56
11	*Su.*	7. 26. 6. 21	8. 3. 6. 7	5. 3. 16	5. 12. 14
12	M.	8. 10. 8. 0	8. 17. 11. 55	5. 16. 38	5. 16. 9
13	Tu.	8. 24. 17. 30	9. 1. 24. 31	5. 10. 55	5. 0. 55
14	W.	9. 8. 32. 41	9. 15. 41. 39	4. 46. 14	4. 27. 8
15	Th.	9. 22. 50. 57	10. 0. 0. 24	4. 3. 46	3. 36. 39
16	F.	10. 7. 9. 22	10. 14. 17. 35	3. 6. 10	2. 32. 49
17	Sa.	10. 21. 24. 22	10. 28. 29. 22	1. 57. 15	1. 19. 57
18	*Su.*	11. 5. 32. 3	11. 12. 32. 0	0. 41. 43 N	0. 3. 5 N
19	M.	11. 19. 28. 40	11. 26. 21. 44	0. 35. 16 S	1. 12. 46 S
20	Tu.	0. 3. 10. 47	0. 9. 55. 32	1. 48. 50	2. 22. 58
21	W.	0. 16. 35. 40	0. 23. 11. 14	2. 54. 45	3. 23. 47
22	Th.	0. 29. 41. 59	1. 6. 8. 6	3. 49. 47	4. 12. 33
23	F.	1. 12. 29. 33	1. 18. 46. 31	4. 31. 52	4. 47. 41
24	Sa.	1. 24. 59. 25	2. 1. 8. 24	4. 59. 53	5. 8. 31
25	*Su.*	2. 7. 13. 55	2. 13. 16. 33	5. 13. 32	5. 15. 2
26	M.	2. 19. 16. 40	2. 25. 14. 50	5. 13. 5	5. 7. 45
27	Tu.	3. 1. 11. 34	3. 7. 7. 28	4. 59. 8	4. 47. 20
28	W.	3. 13. 3. 22	3. 18. 59. 37	4. 32. 29	4. 14. 39
29	Th.	3. 24. 56. 55	4. 0. 55. 47	3. 54. 4	3. 30. 50
30	F.	4. 6. 56. 53	4. 13. 0. 43	3. 5. 9	2. 37. 14

SEPTEMBER 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſc. at Midn.	☽'s Declination at Noon.	☽'s Declination at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	Th.	27	21. 11	107. 57	114. 11	18. 1 N	17. 30 N
2	F.	28	21. 58	120. 26	126. 40	16. 46	15. 52
3	Sa.	29	22. 45	132. 53	139. 5	14. 45	13. 28
4	*Su.*	30	23. 32	145. 16	151. 26	12. 1	10. 25
5	M.	1	☌	157. 36	163. 45	8. 42	6. 51
6	Tu.	2	0. 20	169. 55	176. 7	4. 55	2. 54 N
7	W.	3	1. 8	182. 22	188. 39	0. 50 N	1. 16 S
8	Th.	4	1. 56	194. 59	201. 23	3. 22 S	5. 26
9	F.	5	2. 46	207. 53	214. 29	7. 27	9. 23
10	Sa.	6	3. 38	221. 12	228. 3	11. 12	12. 53
11	*Su.*	7	4. 32	235. 0	242. 6	14. 23	15. 42
12	M.	8	5. 28	249. 18	256. 37	16. 46	17. 36
13	Tu.	9	6. 25	264. 1	271. 29	18. 10	18. 27
14	W.	10	7. 25	278. 59	286. 29	18. 26	18. 7
15	Th.	11	8. 22	293. 58	301. 24	17. 31	16. 39
16	F.	12	9. 18	308. 45	316. 0	15. 30	14. 7
17	Sa.	13	10. 14	323. 9	330. 11	12. 32	10. 46
18	*Su.*	14	11. 8	337. 5	343. 53	8. 51	6. 49
19	M.	15	12. 0	350. 34	357. 9	4. 43	2. 34 S
20	Tu.	16	12. 50	3. 38	10. 3	0. 25 S	1. 45 N
21	W.	17	13. 39	16. 25	22. 43	3. 50 N	5. 52
22	Th.	18	14. 26	28. 58	35. 13	7. 47	9. 36
23	F.	19	15. 14	41. 27	47. 40	11. 17	12. 49
24	Sa.	20	16. 1	53. 53	60. 6	14. 11	15. 23
25	*Su.*	21	16. 49	66. 19	72. 33	16. 23	17. 13
26	M.	22	17. 37	78. 47	85. 1	17. 50	18. 16
27	Tu.	23	18. 24	91. 15	97. 29	18. 29	18. 30
28	W.	24	19. 12	103. 43	109. 57	18. 18	17. 55
29	Th.	25	19. 59	116. 9	122. 22	17. 20	16. 32
30	F.	26	20. 46	128. 32	134. 43	15. 34	14. 25

SEPTEMBER 1774.

Days of the Month.	Days of the Week.	Semid^{r}. ☽ at Noon.	Semid^{r}. ☽ at Midnight.	Hor. Par. ☽ at Noon.	Hor. Par. ☽ at Midnight.	Proport. Logar. at Noon.	Proport. Logar. at Midn.
		M. S.	M. S.	M. S.	M. S.		
1	Th.	14. 50	14. 52	54. 26	54. 34	5194	5183
2	F.	14. 54	14. 57	54. 42	54. 53	5173	5158
3	Sa.	15. 0	15. 4	55. 4	55. 18	5144	5125
4	*Su.*	15. 8	15. 12	55. 32	55. 47	5107	5087
5	M.	15. 16	15. 21	56. 3	56. 18	5067	5048
6	Tu.	15. 25	15. 29	56. 35	56. 50	5026	5006
7	W.	15. 34	15. 38	57. 6	57. 21	4986	4967
8	Th.	15. 42	15. 46	57. 37	57. 50	4947	4931
9	F.	15. 49	15. 53	58. 4	58. 17	4913	4897
10	Sa.	15. 56	15. 59	58. 30	58. 40	4881	4869
11	*Su.*	16. 2	16. 5	58. 51	59. 1	4855	4843
12	M.	16. 7	16. 10	59. 10	59. 18	4832	4822
13	Tu.	16. 11	16. 13	59. 25	59. 31	4813	4806
14	W.	16. 14	16. 15	59. 36	59. 39	4800	4797
15	Th.	16. 16	16. 16	59. 41	59. 41	4794	4794
16	F.	16. 15	16. 14	59. 39	59. 35	4797	4801
17	Sa.	16. 13	16. 10	59. 29	59. 21	4809	4819
18	*Su.*	16. 7	16. 4	59. 9	58. 56	4833	4849
19	M.	15. 59	15. 55	58. 40	58. 24	4869	4889
20	Tu.	15. 50	15. 44	58. 5	57. 46	4912	4936
21	W.	15. 38	15. 33	57. 25	57. 4	4962	4989
22	Th.	15. 27	15. 22	56. 43	56. 22	5015	5042
23	F.	15. 16	15. 11	56. 2	55. 43	5068	5093
24	Sa.	15. 6	15. 2	55. 26	55. 10	5115	5136
25	*Su.*	14. 58	14. 55	54. 57	54. 46	5153	5167
26	M.	14. 53	14. 51	54. 37	54. 30	5179	5189
27	Tu.	14. 50	14. 50	54. 26	54. 25	5194	5195
28	W.	14. 50	14. 51	54. 26	54. 30	5194	5189
29	Th.	14. 53	14. 55	54. 36	54. 45	5181	5169
30	F.	14. 58	15. 1	54. 56	55. 8	5154	5138

SEPTEMBER 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	Noon. D. M. S.	3 Hours. D. M. S.	6 Hours. D. M. S.	9 Hours. D. M. S.
1	The Sun.	52. 3. 25	50. 41. 18	49. 19. 3	47. 56. 41
2		41. 2. 47	39. 39. 33		
7	Antares.	65. 1. 13	63. 24. 5	61. 46. 49	60. 9. 24
8		52. 0. 29	50. 22. 24	48. 44. 13	47. 6. 1
9		38. 55. 19	37. 17. 15	35. 39. 25	34. 1. 49
10		25. 59. 15			
10	α Aquilæ.	75. 53. 31	74. 21. 9	72. 48. 50	71. 16. 34
11		63. 37. 7	62. 5. 50	60. 34. 51	59. 4. 13
12		51. 37. 36	50. 10. 3	48. 43. 15	47. 17. 16
13	β Capricorni.	36. 28. 39	34. 42. 29	32. 56. 14	31. 9. 53
14		22. 17. 0	20. 30. 14	18. 43. 26	16. 56. 36
15	α Pegaſi.	58. 3. 50	56. 25. 47	54. 48. 5	53. 10. 48
16		45. 12. 25	43. 38. 51	42. 6. 10	40. 34. 26
17	α Arietis.	73. 1. 45	71. 18. 31	69. 35. 27	67. 52. 34
18		59. 21. 45	57. 40. 26	55. 59. 26	54. 18. 49
19		46. 2. 19	44. 24. 31	42. 47. 21	41. 10. 52
20		33. 20. 44			
20	Aldebaran.	63. 24. 51	61. 42. 55	60. 1. 17	58. 19. 58
21		49. 57. 59	48. 18. 30	46. 39. 21	45. 0. 30
22		36. 51. 8	35. 14. 12	33. 37. 35	32. 1. 17
23		24. 4. 30	22. 30. 3	20. 55. 54	19. 22. 3
24	Pollux.	56. 14. 20	54. 44. 29	53. 14. 58	51. 45. 48
25		44. 25. 6	42. 57. 59	41. 31. 12	40. 4. 49
26		32. 59. 20			
26	Regulus.	67. 33. 38	66. 4. 21	64. 35. 10	63. 6. 6
27		55. 41. 58	54. 13. 19	52. 44. 41	51. 16. 4
25	The Sun.	115. 5. 21	113. 42. 12	112. 19. 13	110. 56. 24
26		104. 4. 39	102. 42. 42	101. 20. 51	99. 59. 6
27		93. 11. 33	91. 50. 14	90. 28. 55	89. 7. 38
28		82. 20. 58	80. 59. 33	79. 38. 5	78. 16. 33
29		71. 27. 40	70. 5. 35	68. 43. 22	67. 21. 1
30		60. 26. 58	59. 3. 37	57. 40. 4	56. 16. 19
O.1		49. 14. 16			

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	The Sun.	46. 34. 10	45. 11. 32	43. 48. 47	42. 25. 52
7	Antares.	58. 31. 50	56. 54. 9	55. 16. 22	53. 38. 28
8		45. 27. 48	43. 49. 36	42. 11. 28	40. 33. 22
9		32. 24. 26	30. 47. 26	29. 10. 52	27. 34. 47
10	α Aquilæ.	69. 44. 21	68. 12. 15	66. 40. 20	65. 8. 37
11		57. 33. 58	56. 4. 4	54. 34. 40	53. 5. 51
12		45. 52. 9			
12	β Capricorni.	43. 32. 19	41. 46. 33	40. 0. 41	38. 14. 43
13		29. 23. 28	27. 36. 57	25. 50. 22	24. 3. 43
14		15. 9. 44			
14	α Pegaſi.	64. 38. 35	62. 59. 37	61. 20. 48	59. 42. 11
15		51. 33. 59	49. 57. 39	48. 21. 53	46. 46. 47
16		39. 3. 43			
16	α Arietis.	79. 56. 7	78. 12. 21	76. 28. 41	74. 45. 9
17		66. 9. 55	64. 27. 29	62. 45. 17	61. 3. 22
18		52. 38. 37	50. 58. 49	49. 19. 28	47. 40. 37
19		39. 35. 8	38. 0. 10	36. 26. 3	34. 52. 53
20	Aldebaran.	56. 38. 57	54. 58. 15	53. 17. 51	51. 37. 46
21		43. 21. 58	41. 43. 47	40. 5. 55	38. 28. 22
22		30. 25. 18	28. 49. 38	27. 14. 17	25. 39. 14
23		17. 48. 29			
23	Pollux.	62. 17. 3	60. 45. 53	59. 15. 2	57. 44. 31
24		50. 16. 58	48. 48. 29	47. 20. 20	45. 52. 33
25		38. 38. 50	37. 13. 17	35. 48. 10	34. 23. 31
26	Regulus.	61. 37. 8	60. 8. 15	58. 39. 26	57. 10. 40
27		49. 47. 28			
24	The Sun.	120. 39. 54	119. 15. 58	117. 52. 14	116. 28. 42
25		109. 33. 45	108. 11. 16	106. 48. 56	105. 26. 43
26		98. 37. 26	97. 15. 52	95. 54. 22	94. 32. 56
27		87. 46. 21	86. 25. 2	85. 3. 43	83. 42. 21
28		76. 54. 58	75. 33. 17	74. 11. 31	72. 49. 38
29		65. 58. 32	64. 35. 54	63. 13. 6	61. 50. 7
30		54. 52. 22	53. 28. 12	52. 3. 47	50. 39. 9

SEPTEMBER 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Aldebaran.	40. 18. 51	41. 48. 12	43. 17. 41	44. 47. 17
2		52. 17. 22	53. 47. 51	55. 18. 30	56. 49. 19
3		64. 25. 58	65. 57. 52	67. 29. 58	69. 2. 17
4		76. 47. 0			
9	The Sun.	41. 54. 7	43. 28. 46	45. 3. 35	46. 38. 35
10		54. 35. 55	56. 11. 51	57. 47. 55	59. 24. 9
11		67. 27. 21	69. 4. 25	70. 41. 36	72. 18. 56
12		80. 27. 23	82. 5. 27	83. 43. 38	85. 21. 56
13		93. 35. 2	95. 13. 58	96. 52. 59	98. 32. 6
14		106. 48. 58	108. 28. 34	110. 8. 14	111. 47. 58
15		120. 7. 15			
13	Spica ♍	63. 56. 14	65. 41. 54	67. 27. 41	69. 13. 34
14		78. 4. 30			
14	Antares.	33. 13. 27	34. 55. 22	36. 37. 42	38. 20. 27
15		46. 58. 59	48. 43. 26	50. 28. 3	52. 12. 49
16		60. 58. 12	62. 43. 29	64. 28. 48	66. 14. 9
17	β Capricorni.	20. 38. 21	22. 24. 59	24. 11. 33	25. 58. 1
18		34. 48. 26	36. 34. 5	38. 19. 34	40. 4. 52
19		48. 48. 14			
19	α Aquilæ.	56. 58. 5	58. 27. 34	59. 57. 20	61. 27. 20
20		68. 59. 16	70. 29. 45	72. 0. 14	73. 30. 39
21		81. 0. 47			
21	Fomalhaut.	48. 11. 29	49. 37. 42	51. 4. 12	52. 30. 55
22		59. 46. 44	61. 14. 5	62. 41. 27	64. 8. 48
23		71. 24. 15	72. 50. 59	74. 17. 35	75. 44. 2
24	α Pegaſi.	68. 4. 2	69. 29. 52	70. 55. 35	72. 21. 12
25		79. 27. 28	80. 52. 22	82. 17. 9	83. 41. 49
26	α Arietis.	47. 5. 58	48. 30. 22	49. 54. 52	51. 19. 29
27		58. 23. 52	59. 48. 59	61. 14. 10	62. 39. 25
28	Aldebaran.	36. 16. 50	37. 45. 39	39. 14. 32	40. 43. 28
29		48. 9. 27	49. 38. 58	51. 8. 37	52. 38. 24
30		60. 9. 43	61. 40. 31	63. 11. 31	64. 42. 44
O. 1		72. 22. 14			

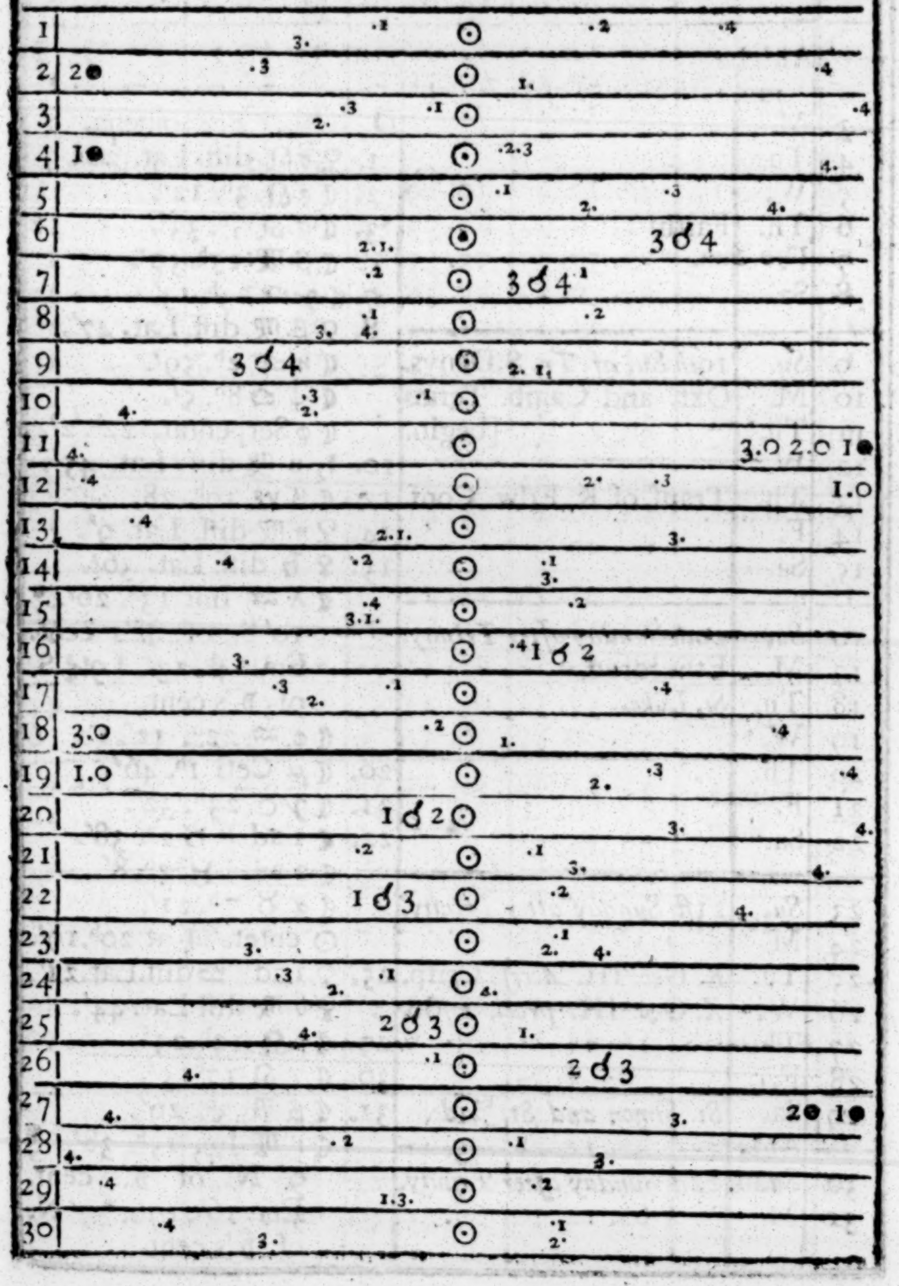
SEPTEMBER 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Aldebaran.	46. 17. 1	47. 46. 53	49. 16. 54	50. 47. 3
2		58. 20. 18	59. 51. 27	61. 22. 46	62. 54. 16
3		70. 34. 48	72. 7. 32	73. 40. 28	75. 13. 37
8	The Sun.			38. 45. 21	40. 19. 38
9		48. 13. 45	49. 49. 3	51. 24. 31	53. 0. 8
10		61. 0. 31	62. 37. 1	64. 13. 39	65. 50. 26
11		73. 56. 23	75. 33. 57	77. 11. 38	78. 49. 27
12		87. 0. 21	88. 38. 52	90. 17. 29	91. 56. 13
13		100. 11. 18	101. 50. 36	103. 29. 59	105. 9. 26
14		113. 27. 45	115. 7. 35	116. 47. 27	118. 27. 20
12	Spica ♍	56. 54. 46	58. 39. 57	60. 25. 15	62. 10. 41
13		70. 59. 34	72. 45. 40	74. 31. 51	76. 18. 8
14	Antares.	40. 3. 34	41. 47. 1	43. 30. 43	45. 14. 44
15		53. 57. 44	55. 42. 44	57. 27. 48	59. 12. 57
16		67. 59. 30			
16	β Capricorni.	13. 31. 18	15. 18. 7	17. 4. 54	18. 51. 39
17		27. 44. 22	29. 30. 36	31. 16. 41	33. 2. 38
18		41. 49. 58	43. 34. 52	45. 19. 33	47. 4. 0
19	α Aquilæ.	62. 57. 32	64. 27. 53	65. 58. 16	67. 28. 44
20		75. 0. 57	76. 31. 9	78. 1. 12	79. 31. 6
21	Fomalhaut.	53. 57. 49	55. 24. 53	56. 52. 5	58. 19. 23
22		65. 36. 5	67. 3. 17	68. 30. 23	69. 57. 22
23		77. 10. 17			
23	α Pegaſi.	62. 19. 45	63. 45. 58	65. 12. 5	66. 38. 6
24		73. 46. 42	75. 12. 4	76. 37. 19	78. 2. 27
25		85. 6. 22			
25	α Arietis.	41. 29. 49	42. 53. 37	44. 17. 35	45. 41. 42
26		52. 44. 12	54. 9. 0	55. 33. 53	56. 58. 50
27		64. 4. 44			
27	Aldebaran.	30. 21. 49	31. 50. 33	33. 19. 18	34. 48. 3
28		42. 12. 28	43. 41. 34	45. 10. 45	46. 40. 3
29		54. 8. 19	55. 38. 24	57. 8. 40	58. 39. 6
30		66. 14. 10	67. 45. 49	69. 17. 43	70. 49. 51

SEPTEMBER 1774.

Configurations of the SATELLITES of JUPITER at 4 o' th' Clock in the Morning.



Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	Sa.	Remigius.
2	*Su.*	18*th Sunday after Trinity.*
3	M.	
4	Tu.	
5	W.	
6	Th.	Faith.
7	F.	
8	Sa.	
9	*Su.*	19*th Su. af. Tr.* S.Denys.
10	M.	Oxf, and Camb. Terms
11	Tu.	[begin.
12	W.	
13	Th.	Tranſ. of K. Edw. Conf.
14	F.	
15	Sa.	
16	*Su.*	20*th Sunday after Trinity.*
17	M.	Etheldred.
18	Tu.	*St. Luke.*
19	W.	
20	Th.	
21	F.	
22	Sa.	
23	*Su.*	21*ſt Sunday after Trinity.*
24	M.	
25	Tu.	*K. Geo.* III. *Acceſ.* Criſp.
26	W.	*K. Geo.* III. *procl.* 1760.
27	Th.	
28	F.	
29	Sa.	*St. Simon and St. Jude.*
30	*Su.*	22*d Sunday after Trinity.*
31	M.	

Phaſes of the Moon.

	D.	H.	M.
New Moon —	5.	3.	0
Firſt Quarter—	11.	23.	33
Full Moon —	19.	2.	27
Laſt Quarter —	27.	3.	8

D. Other Phenomena.
1. ♀ σ ♌ diff. Lat. 20′.
2. ☾ ϱ ♌ 3^{h}. 12′.
3. ☾ τ ♌ 7^{h}. 33′.
☾ β ♍ 17^{h}. 50′.
7. ☾ γ ♎ 23^{h}. 13′.
8. ♀ β ♍ diff. Lat. 47′.
☾ η ♎ 2^{h}. 59′.
☾ ψ ♎ 8^{h}. 5′.
☾ φ Serpentar. 22^{h}. 2′.
10. ♄ η ♍ diff. Lat. 45′.
12. ☾ β ♑ 19^{h}. 28.
14. ♀ η ♍ diff. Lat. 9′.
15. ♀ ♄ diff. Lat. 36′.
☾ λ ♒ Im. 13^{h}. 26′. * 10′ S. of ☽'s cent. Em. 14^{h}. 13′. * 9′¾ S. of ☽'s cent.
☾ φ ♒ 22^{h}. 12′.
20. ☾ μ Ceti 1^{h}. 46′.
21. ☾ γ ♉ 23^{h}. 32′.
22. ☾ 1 ad δ ♉ 1^{h}. 38′.
☾ 2 ad δ ♉ 2^{h}. 8′.
☾ α ♉ 7^{h}. 21′.
☉ enters ♏ at 20^{h}. 19′.
25. ☿ 1 ad ♎ diff. Lat. 21′.
♀ θ ♍ diff. Lat. 44′.
29. ☾ ρ ♌ 12^{h}. 25′.
30. ☾ τ ♌ 17^{h}. 5′.
31. ☾ β ♍ 3^{h}. 26′.
☾ η ♍ Im. 15^{h}. 38′. * 9′ N. of ☽'s cent. Em. 16^{h}. 27′. * 7′ N. of ☽'s cent.

OCTOBER 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Afc. in Time.	Sun's Declin. South.	Equat. of Time Sub.	Diff.
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	Sa.	6. 8. 20. 7	12. 30. 37,1	3. 18. 33	10.25,4	18,6
2	*Su.*	6. 9. 19. 17	12. 34. 15,0	3. 41. 53	10.44,0	18,3
3	M.	6. 10. 18. 29	12. 37. 53,2	4. 5. 10	11. 2,3	17,9
4	Tu.	6. 11. 17. 43	12. 41. 31,8	4. 28. 24	11.20,2	17,6
5	W.	6. 12. 16. 59	12. 45. 10,7	4. 51. 34	11.37,8	17,2
6	Th.	6. 13. 16. 18	12. 48. 50,0	5. 14. 42	11.55,0	16,8
7	F.	6. 14. 15. 38	12. 52. 29,7	5. 37. 45	12.11,8	16,4
8	Sa.	6. 15. 15. 0	12. 56. 9,8	6. 0. 44	12.28,2	16,0
9	*Su.*	6. 16. 14. 25	12. 59. 50,4	6. 23. 38	12.44,2	15,5
10	M.	6. 17. 13. 51	13. 3. 31,4	6. 46. 27	12.59,7	15,1
11	Tu.	6. 18. 13. 18	13. 7. 12,8	7. 9. 10	13.14,8	14,6
12	W.	6. 19. 12. 48	13. 10. 54,7	7. 31. 48	13.29,4	14,1
13	Th.	6. 20. 12. 19	13. 14. 37,1	7. 54. 19	13.43,5	13,6
14	F.	6. 21. 11. 52	13. 18. 20,0	8. 16. 43	13.57,1	13,1
15	Sa.	6. 22. 11. 26	13. 22. 3,4	8. 39. 0	14.10,2	12,6
16	*Su.*	6. 23. 11. 2	13. 25. 47,4	9. 1. 9	14.22,8	11,9
17	M.	6. 24. 10. 40	13. 29. 31,9	9. 23. 11	14.34,7	11,4
18	Tu.	6. 25. 10. 20	13. 33. 17,1	9. 45. 5	14.46,1	10,8
19	W.	6. 26. 10. 2	13. 37. 2,9	10. 6. 50	14.56,9	10,1
20	Th.	6. 27. 9. 46	13. 40. 49,2	10. 28. 26	15. 7,0	9,5
21	F.	6. 28. 9. 32	13. 44. 36,3	10. 49. 53	15.16,5	8,8
22	Sa.	6. 29. 9. 20	13. 48. 24,0	11. 11. 10	15.25,3	8,1
23	*Su.*	7. 0. 9. 10	13. 52. 12,4	11. 32. 17	15.33,4	7,4
24	M.	7. 1. 9. 2	13. 56. 1,5	11. 53. 14	15.40,8	6,7
25	Tu.	7. 2. 8. 57	13. 59. 51,4	12. 14. 0	15.47,5	6,0
26	W.	7. 3. 8. 53	14. 3. 42,0	12. 34. 35	15.53,5	5,2
27	Th.	7. 4. 8. 52	14. 7. 33,3	12. 54. 58	15.58,7	4,4
28	F.	7. 5. 8. 54	14. 11. 25,5	13. 15. 9	16. 3,1	3,6
29	Sa.	7. 6. 8. 58	14. 15. 18,4	13. 35. 8	16. 6,7	2,8
30	*Su.*	7. 7. 9. 3	14. 19. 12,1	13. 54. 54	16. 9,5	2,0
31	M.	7. 8. 9. 11	14. 23. 6,6	14. 14. 27	16.11,5	1,2

OCTOBER 1774.

Days of the Month.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	16. 2,9	1. 4,3	2. 27,8	9. 999975	5. 11. 36
7	16. 4,5	1. 4,6	2. 28,4	9. 999227	5. 11. 17
13	16. 6,1	1. 5,0	2. 28,9	9. 998462	5. 10. 58
19	16. 7,8	1. 5,5	2. 29,3	9. 997714	5. 10. 39
25	16. 9,4	1. 6,1	2. 29,8	9. 997015	5. 10. 20

Eclipſes of the SATELLITES of JUPITER.

I. Satellite. Immerſions.		II. Satellite. Immerſions.		III. Satellite. Immerſions.	
Days	H. M. S.	Days	H. M. S.	Days	H. M. S.
1	21. 16. 12	3	15*11. 7	5	9*37. 28
3	15*45. 13	7	4. 31. 8	12	13*39. 45
5	10*14. 12	10	17. 50. 57	19	17*42. 2
7	4. 43. 13	14	7*10. 41	26	21. 43. 54
8	23. 12. 11	17	20. 30. 18		
10	17*41. 9	21	9*49. 52		
12	12*10. 4	24	23 9. 20		
14	6. 39. 0	28	12*28. 37		
16	1. 7. 54				
17	19. 36. 47				
19	14* 5. 38				
21	8*34. 28				
23	3. 3. 17				
24	21. 32. 4				
26	16* 0. 48				
28	10*29. 30				
30	4. 58. 11				
31	23. 26. 49				

IV. Satellite.		Conj.
1	17. 56	Inf.
10	3. 46	Sup.
18	12*10	Inf.
26	22. 2	Sup.

OCTOBER 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſage over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
MERCURY.						
1	6. 10. 53	4. 1 N	6. 9. 5	1. 10 N	2. 32 S	0. 5
7	7. 0. 55	1. 48 N	6. 19. 18	0. 33 N	7. 3	0. 20
13	7. 18. 50	0. 22 S	6. 29. 5	0. 7 S	11. 16	0. 33
19	8. 5. 37	2. 23	7. 8. 29	0. 48	15. 6	0. 46
25	8. 22. 6	4. 9	7. 17. 32	1. 26	18. 27	0. 59
VENUS.						
1	4. 9. 54	2. 47 N	5. 14. 23	1. 20 N	7. 23 N	22. 35
7	4. 19. 40	3. 4	5. 21. 47	1. 27	4. 35	22. 40
13	4. 29. 25	3. 16	5. 29. 14	1. 31	1. 42 N	22. 46
19	5. 9. 10	3. 22	6. 6. 41	1. 32	1. 15 S	22. 51
25	5. 18. 54	3. 23	6. 14. 10	1. 31	4. 11	22. 55
MARS.						
1	2. 29. 20	1. 13 N	4. 4. 8	1. 7 N	20. 20 N	19. 55
7	3. 2. 14	1. 17	4. 7. 35	1. 12	19. 34	19. 48
13	3. 5. 7	1. 21	4. 10. 58	1. 19	18. 46	19. 39
19	3. 7. 59	1. 25	4. 14. 16	1. 25	17. 55	19. 30
25	3. 10. 49	1. 28	4. 17. 29	1. 31	17. 3	19. 20
JUPITER.						
1	1. 8. 3	1. 9 S	1. 14. 56	1. 22 S	15. 1 N	14. 19
7	1. 8. 36	1. 9	1. 14. 23	1. 23	14. 50	13. 55
13	1. 9. 9	1. 8	1. 13. 44	1. 24	14. 39	13. 30
19	1. 9. 41	1. 8	1. 13. 0	1. 24	14. 26	13. 4
25	1. 10. 14	1. 7	1. 12. 14	1. 24	14. 12	12. 38
SATURN.						
1	5. 29. 40	2. 19 N	6. 0. 29	2. 6 N	1. 44 N	23. 32
7	5. 29. 52	2. 20	6. 1. 13	2. 7	1. 27	23. 12
13	6. 0. 4	2. 20	6. 1. 57	2. 7	1. 10	22. 53
19	6. 0. 16	2. 20	6. 2. 40	2. 8	0. 54	22. 33
25	6. 0. 28	2. 20	6. 3. 21	2. 9	0. 38	22. 13

OCTOBER 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M.S.
1	Sa.	4. 19. 7. 52	4. 25. 18. 42	2. 7. 12 S	1.35.27 S
2	*Su.*	5. 1. 33. 38	5. 7. 52. 59	1. 2. 12 S	0.27.49 S
3	M.	5. 14. 17. 7	5. 20. 46. 6	0. 7. 17 N	0.42.44 N
4	Tu.	5. 27. 20. 2	6. 3. 58. 51	1. 18. 0	1.52.40
5	W.	6. 10. 42. 31	6. 17. 30. 48	2. 26. 6	2.57.51
6	Th.	6. 24. 23. 22	7. 1. 19. 42	3. 27. 22	3.54. 0
7	F.	7. 8. 19. 35	7. 15. 22. 18	4. 17. 23	4.36.59
8	Sa.	7. 22. 27. 23	7. 29. 34. 11	4. 52. 29	5. 3.30
9	*Su.*	8. 6. 42. 13	8. 13. 50. 50	5. 9. 52	5.11.25
10	M.	8. 20. 59. 39	8. 28. 8. 0	5. 8. 9	5. 0. 6
11	Tu.	9. 5. 15. 41	9. 12. 22. 20	4. 47. 27	4.30.22
12	W.	9. 19. 27. 39	9. 26. 31. 19	4. 9. 10	3.44.18
13	Th.	10. 3. 33. 19	10. 10. 33. 21	3. 16. 8	2.45. 8
14	F.	10. 17. 31. 27	10. 24. 27. 22	2. 11. 50	1.36.45
15	Sa.	11. 1. 21. 9	11. 8. 12. 31	1. 0. 28 N	0.23.32 N
16	*Su.*	11. 15. 1. 29	11. 21. 47. 55	0. 13. 29 S	0.50. 3 S
17	M.	11. 28. 31. 38	0. 5. 12. 32	1. 25. 36	1.59.42
18	Tu.	0. 11. 50. 29	0. 18. 25. 14	2. 31. 54	3. 1.43
19	W.	0. 24. 56. 48	1. 1. 24. 57	3. 28. 53	3.53. 5
20	Th.	1. 7. 49. 40	1. 14. 10. 50	4. 14. 6	4.31.41
21	F.	1. 20. 28. 26	1. 26. 42. 36	4. 45. 49	4.56.23
22	Sa.	2. 2. 53. 21	2. 9. 1. 0	5. 3. 20	5. 6.46
23	*Su.*	2. 15. 5. 30	2. 21. 7. 25	5. 6. 37	5. 3. 6
24	M.	2. 27. 7. 1	3. 3. 4. 43	4. 56. 14	4.46.13
25	Tu.	3. 9. 1. 4	3. 14. 56. 26	4. 33. 5	4.17. 6
26	W.	3. 20. 51. 35	3. 26. 46. 59	3. 58. 20	3.37. 3
27	Th.	4. 2. 43. 17	4. 8. 41. 13	3. 13. 16	2.47.21
28	F.	4. 14. 41. 24	4. 20. 44. 26	2. 19. 22	1.49.39
29	Sa.	4. 26. 51. 5	5. 3. 1. 53	1. 18. 23	0.45.52 S
30	*Su.*	5. 9. 17. 27	5. 15. 38. 19	0. 12. 26 S	0.21.37 N
31	M.	5. 22. 4. 57	5. 28. 37. 34	0. 55. 54 N	1.29.53

OCTOBER 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſs-age over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſcen. at Midn.	☽'s Declinat. at Noon.	☽'s Declinat. at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	Sa.	27	21. 34	140. 53	147. 3	13. 4 N	11. 36 N
2	*Su.*	28	22. 21	153. 12	159. 23	9. 58	8. 11
3	M.	29	23. 9	165. 34	171. 48	6. 18	4. 19
4	Tu.	30	23. 58	178. 4	184. 24	2. 15 N	0. 8 N
5	W.	1	б	190. 48	197. 17	2. 0 S	4. 9 S
6	Th.	2	0. 48	203. 52	210. 33	6. 15	8. 17
7	F.	3	1. 41	217. 21	224. 17	10. 14	12. 2
8	Sa.	4	2. 35	231. 19	238. 29	13. 41	15. 8
9	*Su.*	5	3. 31	245. 46	253. 8	16. 22	17. 20
10	M.	6	4. 29	260. 34	268. 2	18. 2	18. 27
11	Tu.	7	5. 28	275. 32	283. 1	18. 34	18. 24
12	W.	8	6. 26	290. 27	297. 48	17. 56	17. 12
13	Th.	9	7. 22	305. 5	312. 14	16. 12	14. 58
14	F.	10	8. 16	319. 17	326. 13	13. 30	11. 52
15	Sa.	11	9. 9	333. 1	339. 43	10. 4	8. 8
16	*Su.*	12	9. 59	346. 18	352. 48	6. 7	4. 1 S
17	M.	13	10. 48	359. 13	5. 34	1. 54 S	0. 14 N
18	Tu.	14	11. 37	11. 53	18. 9	2. 21 N	4. 26
19	W.	15	12. 24	24. 23	30. 37	6. 26	8. 20
20	Th.	16	13. 12	36. 51	43. 5	10. 8	11. 47
21	F.	17	14. 0	49. 20	55. 35	13. 18	14. 38
22	Sa.	18	14. 48	61. 51	68. 8	15. 48	16. 46
23	*Su.*	19	15. 36	74. 25	80. 42	17. 33	18. 8
24	M.	20	16. 23	86. 58	93. 14	18. 30	18. 40
25	Tu.	21	17. 11	99. 29	105. 43	18. 37	18. 22
26	W.	22	17. 58	111. 55	118. 6	17. 55	17. 16
27	Th.	23	18. 45	124. 15	130. 22	16. 26	15. 25
28	F.	24	19. 31	136. 28	142. 33	14. 13	12. 52
29	Sa.	25	20. 17	148. 37	154. 42	11. 21	9. 41
30	*Su.*	26	21. 4	160. 48	166. 55	7. 54	6. 0
31	M.	27	21. 51	173. 6	179. 20	4. 0	1. 55

OCTOBER 1774.

Days of the Month.	Days of the Week.	Semid^r. ☽ at Noon. M. S.	Semid^r. ☽ at Midnight. M. S.	Hor. Par. ☽ at Noon. M. S.	Hor. Par. ☽ at Midnight. M. S.	Proport. Logar. at Noon.	Proport. Logar. at Mid.
1	Sa.	15. 6	15. 10	55. 24	55. 40	5118	5097
2	*Su.*	15. 15	15. 21	55. 58	56. 17	5073	5049
3	M.	15. 26	15. 31	56. 37	56. 57	5023	4998
4	Tu.	15. 37	15. 42	57. 18	57. 37	4971	4947
5	W.	15. 47	15. 52	57. 56	58. 14	4923	4901
6	Th.	15. 56	16. 0	58. 30	58. 44	4881	4864
7	F.	16. 4	16. 7	58. 57	59. 8	4848	4834
8	Sa.	16. 9	16. 11	59. 17	59. 24	4823	4815
9	*Su.*	16. 13	16. 13	59. 29	59. 32	4809	4805
10	M.	16. 14	16. 13	59. 33	59. 33	4804	4804
11	Tu.	16. 13	16. 12	59. 31	59. 28	4806	4810
12	W.	16. 11	16. 10	59. 24	59. 19	4815	4821
13	Th.	16. 8	16. 6	59. 12	59. 5	4830	4838
14	F.	16. 4	16. 1	58. 57	58. 48	4848	4859
15	Sa.	15. 58	15. 55	58. 37	58. 26	4872	4886
16	*Su.*	15. 52	15. 49	58. 14	58. 1	4901	4917
17	M.	15. 45	15. 41	57. 47	57. 32	4934	4953
18	Tu.	15. 37	15. 32	57. 17	57. 1	4972	4992
19	W.	15. 28	15. 23	56. 44	56. 27	5014	5036
20	Th.	15. 19	15. 14	56. 11	55. 55	5056	5077
21	F.	15. 10	15. 6	55. 39	55. 24	5098	5118
22	Sa.	15. 2	14. 59	55. 11	54. 58	5134	5152
23	*Su.*	14. 56	14. 53	54. 47	54. 38	5166	5178
24	M.	14. 51	14. 50	54. 30	54. 26	5189	5194
25	Tu.	14. 49	14. 49	54. 23	54. 22	5198	5199
26	W.	14. 49	14. 51	54. 24	54. 29	5197	5190
27	Th.	14. 53	14. 55	54. 36	54. 45	5181	5169
28	F.	14. 58	15. 2	54. 57	55. 12	5153	5133
29	Sa.	15. 7	15. 12	55. 29	55. 48	5111	5086
30	*Su.*	15. 18	15. 24	56. 9	56. 32	5059	5029
31	M.	15. 31	15. 38	56. 55	57. 20	5090	4968

OCTOBER 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	The Sun.	49. 14. 16	47. 49. 10	46. 23. 50	44. 58. 15
7	α Aquilæ.	79. 25. 15	77. 50. 47	76. 16. 20	74. 41. 54
8		66. 51. 17	65. 17. 43	63. 44. 26	62. 11. 27
9		54. 32. 51	53. 2. 48	51. 33. 28	50. 4. 56
10	β Capricorni.	39. 45. 38	37. 58. 58	36. 12. 20	34. 25. 44
11		25. 33. 12	23. 46. 51	22. 0. 34	20. 14. 22
12	α Pegaſi.	61. 12. 22	59. 34. 59	57. 57. 59	56. 21. 22
13		48. 25. 41	46. 52. 23	45. 19. 50	43. 48. 7
14		36. 25. 12			
14	α Arietis.	76. 48. 47	75. 7. 40	73. 26. 41	71. 45. 52
15		63. 24. 41	61. 45. 8	60. 5. 52	58. 26. 53
16		50. 16. 41	48. 39. 45	47. 3. 16	45. 27. 14
17	Aldebaran.	68. 5. 2	66. 24. 12	64. 43. 33	63. 3. 7
18		54. 43. 57	53. 4. 46	51. 25. 48	49. 47. 4
19		41. 36. 41	39. 59. 18	38. 22. 10	36. 45. 16
20		28. 44. 19	27. 8. 51	25. 33. 37	23. 58. 38
21		16. 7. 21			
21	Pollux.	60. 37. 0	59. 5. 35	57. 34. 28	56. 3. 39
22		48. 34. 17	47. 5. 22	45. 36. 46	44. 8. 31
23		36. 53. 12			
23	Regulus.	71. 43. 29	70. 13. 10	68. 43. 0	67. 13. 1
24		59. 45. 6	58. 15. 53	56. 46. 45	55. 17. 43
25		47. 53. 39	46. 25. 2	44. 56. 26	43. 27. 52
26		36. 5. 1	34. 36. 24	33. 7. 45	31. 39. 4
27		24. 14. 42	22. 45. 35	21. 16. 22	19. 47. 3
24	The Sun.			121. 10. 26	119. 49. 4
25		113. 3. 15	111. 42. 16	110. 21. 18	109. 0. 21
26		102. 15. 30	100. 54. 29	99. 33. 24	98. 12. 16
27		91. 25. 27	90. 3. 47	88. 41. 58	87. 20. 2
28		80. 27. 58	79. 5. 2	77. 41. 53	76. 18. 31
29		69. 18. 13	67. 53. 24	66. 28. 18	65. 2. 55
30		57. 51. 36	56. 24. 24	54. 56. 53	53. 29. 2
31		46. 4. 40	44. 34. 46	43. 4. 33	41. 34. 0

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	The Sun.	43. 32. 24	42. 6. 17	40. 39. 55	39. 13. 17
6	α Aquilæ.	85. 42. 40	84. 8. 26	82. 34. 6	80. 59. 42
7		73. 7. 32	71. 33. 15	69. 59. 6	68. 25. 6
8		60. 38. 49	59. 6. 35	57. 34. 49	56. 3. 33
9		48. 37. 15			
9	β Capricorni.	46. 52. 33	45. 5. 47	43. 19. 2	41. 32. 19
10		32. 39. 9	30. 52. 36	29. 6. 5	27. 19. 37
11		18. 28. 15			
11	α Pegaſi.	67. 45. 7	66. 6. 31	64. 28. 10	62. 50. 7
12		54. 45. 12	53. 9. 29	51. 34. 18	49. 59. 41
13		42. 17. 20	40. 47. 33	39. 18. 53	37. 51. 25
14	α Arietis.	70. 5. 13	68. 24. 45	66. 44. 30	65. 4. 29
15		56. 48. 11	55. 9. 46	53. 31. 43	51. 54. 1
16		43. 51. 41			
16	Aldebaran.	74. 50. 13	73. 8. 39	71. 27. 16	69. 46. 4
17		61. 22. 52	59. 42. 49	58. 2. 59	56. 23. 22
18		48. 8. 33	46. 30. 14	44. 52. 9	43. 14. 18
19		35. 8. 37	33. 32. 11	31. 55. 59	30. 20. 2
20		22. 23. 54	20. 49. 24	19. 15. 8	17. 41. 7
21	Pollux.	54. 33. 9	53. 2. 57	51. 33. 5	50. 3. 31
22		42. 40. 38	41. 13. 9	39. 46. 4	38. 19. 25
23	Regulus.	65. 43. 10	64. 13. 28	62. 43. 53	61. 14. 26
24		53. 48. 46	52. 19. 54	50. 51. 5	49. 22. 20
25		41. 59. 19	40. 30. 45	39. 2. 11	37. 33. 36
26		30. 10. 20	28. 41. 32	27. 12. 40	25. 43. 43
27		18. 17. 38			
24	The Sun.	118. 27. 47	117. 6. 34	115. 45. 24	114. 24. 18
25		107. 39. 25	106. 18. 28	104. 57. 30	103. 36. 30
26		96. 51. 5	95. 29. 49	94. 8. 27	92. 47. 0
27		85. 57. 57	84. 35. 43	83. 13. 18	81. 50. 43
28		74. 54. 57	73. 31. 8	72. 7. 5	70. 42. 46
29		63. 37. 16	62. 11. 19	60. 45. 3	59. 18. 29
30		52. 0. 51	50. 32. 19	49. 3. 26	47. 34. 13
31		40. 3. 6			

OCTOBER 1774.

Diſtances of ☽'s Center from Stars, and from ⊙ weſt of her.

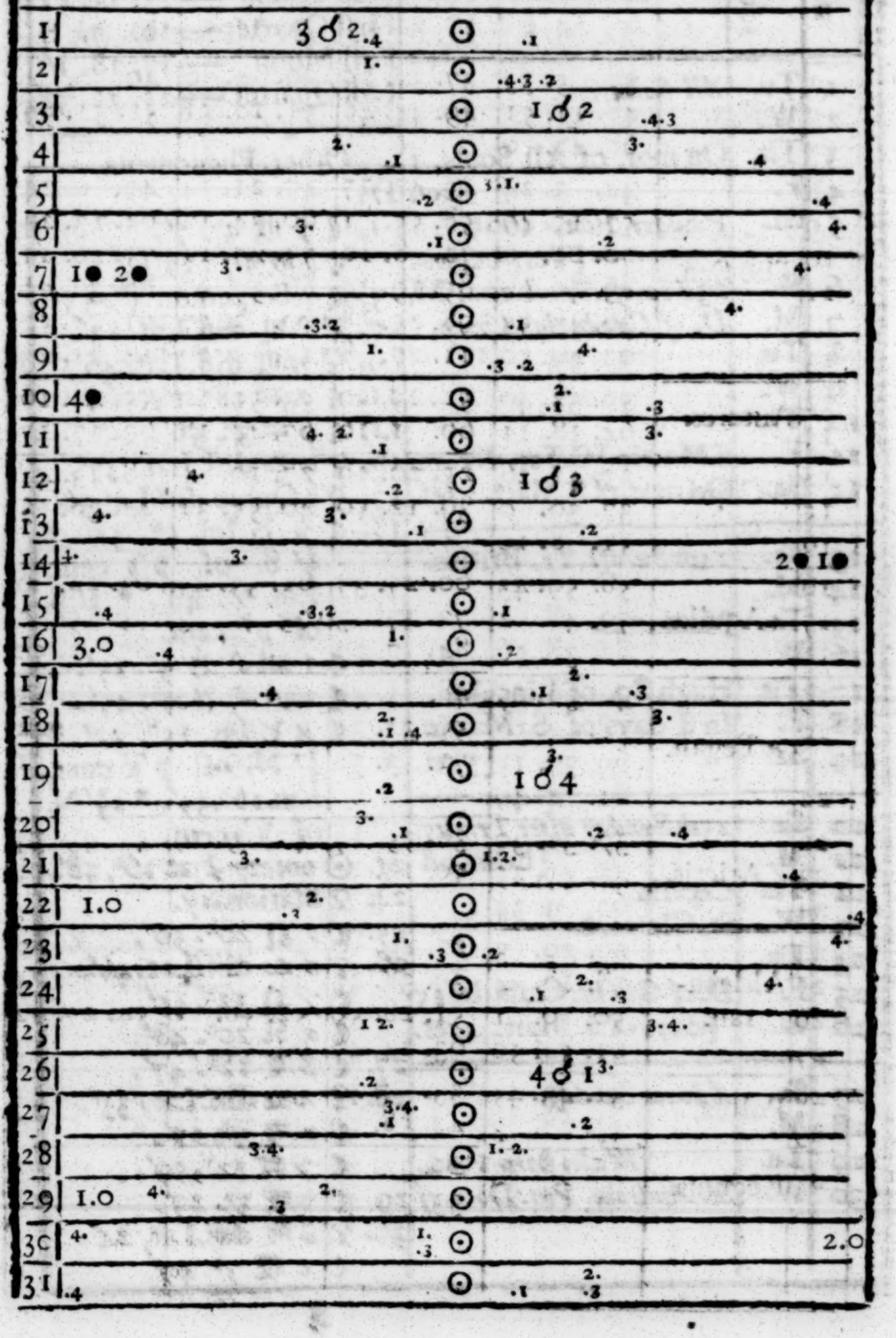
Days.	Stars Names.	Noon.	3 Hours.	6 H6ours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Pollux.	30. 16. 21	31. 42. 36	33. 9. 34	34. 37. 14
2		42. 4. 39	43. 35. 44	45. 7. 18	46. 39. 20
3		54. 26. 13	56. 0. 50	57. 35. 51	59. 11. 15
8	The Sun.		39. 7. 15	40. 45. 52	42. 24. 35
9		50. 39. 18	52. 18. 23	53. 57. 30	55. 36. 39
10		63. 52. 36	65. 31. 46	67. 10. 54	68. 50. 1
11		77. 5. 8	78. 44. 3	80. 22. 54	82. 1. 43
12		90. 14. 49	91. 53. 12	93. 31. 30	95. 9. 44
13		103. 19. 40	104. 57. 22	106. 34. 57	108. 12. 27
14		116. 18. 20	117. 55. 10	119. 31. 51	121. 8. 25
12	Antares.	43. 40. 41	45. 23. 33	47. 6. 30	48. 49. 32
13		57. 25. 31	59. 8. 43	60. 51. 54	62. 35. 3
14		71. 10. 12			
14	β Capricorni.	16. 46. 0	18. 30. 14	20. 14. 23	21. 58. 27
15		30. 37. 16	32. 20. 39	34. 3. 54	35. 47. 1
16		44. 20. 26	46. 2. 39	47. 44. 42	49. 26. 36
17	α Aquilæ.	64. 52. 38	66. 21. 20	67. 50. 8	69. 19. 3
18		76. 44. 0	78. 12. 52	79. 41. 39	81. 10. 21
19		88. 31. 48			
19	α Pegaſi.	40. 59. 31	42. 22. 59	43. 47. 0	45. 11. 31
20		52. 19. 20	53. 45. 34	55. 11. 56	56. 38. 24
21		63. 51. 18	65. 17. 52	66. 44. 23	68. 10. 51
22		75. 21. 51	76. 47. 45	78. 13. 33	79. 39. 15
23	α Arietis.	43. 8. 2	44. 32. 42	45. 57. 30	47. 22. 25
24		54. 28. 8	55. 53. 27	57. 18. 48	58. 44. 10
25	Aldebaran.	32. 15. 25	33. 44. 7	35. 12. 47	36. 41. 26
26		44. 4. 47	45. 33. 31	47. 2. 17	48. 31. 7
27		55. 56. 28	57. 25. 51	58. 55. 22	60. 25. 2
28		67. 55. 44			
28	Pollux.	26. 7. 43	27. 30. 26	28. 54. 3	30. 18. 31
29		37. 31. 24	38. 59. 47	40. 28. 42	41. 58. 7
30		49. 32. 35			
30	Regulus.	12. 36. 33	14. 10. 48	15. 45. 32	17. 20. 44
31		25. 23. 11	27. 0. 53	28. 38. 58	30. 17. 28
N. 1		38. 35. 58			

OCTOBER 1774.

Diſtances of ☽'s Center from Stars, and from ☉ weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Pollux.	36. 5. 33	37. 34. 29	39. 4. 0	40. 34. 4
2		48. 11. 51	49. 44. 48	51. 18. 11	52. 51. 59
3		60. 47. 0			
8	The Sun.	44. 3. 24	45. 42. 17	47. 21. 14	49. 0. 14
9		57. 15. 49	58. 55. 1	60. 34. 12	62. 13. 24
10		70. 29. 6	72. 8. 10	73. 47. 11	75. 26. 11
11		83. 40. 28	85. 19. 10	86. 57. 47	88. 36. 20
12		96. 47. 53	98. 25. 58	100. 3. 57	101. 41. 52
13		109. 49. 50	111. 27. 8	113. 4. 19	114. 41. 23
12	Antares.	50. 32. 40	52. 15. 50	53. 59. 2	55. 42. 16
13		64. 18. 11	66. 1. 16	67. 44. 18	69. 27. 17
14	β Capricorni.	23. 42. 26	25. 26. 19	27. 10. 5	28. 53. 44
15		37. 30. 0	39. 12. 50	40. 55. 31	42. 38. 3
16		51. 8. 19			
16	α Aquilæ.	58. 59. 43	60. 27. 37	61. 55. 45	63. 24. 6
17		70. 48. 2	72. 17. 3	73. 46. 3	75. 15. 2
18		82. 38. 56	84. 7. 23	85. 35. 41	87. 3. 50
19	α Pegaſi.	46. 36. 27	48. 1. 46	49. 27. 23	50. 53. 15
20		58. 4. 56	59. 31. 31	60. 58. 6	62. 24. 42
21		69. 37. 15	71. 3. 32	72. 29. 44	73. 55. 51
22		81. 4. 49			
22	α Arietis.	37. 31. 30	38. 55. 17	40. 19. 19	41. 43. 34
23		48. 47. 25	50. 12. 30	51. 37. 39	53. 2. 52
24		60. 9. 34			
24	Aldebaran.	26. 20. 3	27. 49. 0	29. 17. 52	30. 46. 40
25		38. 10. 4	39. 38. 43	41. 7. 23	42. 36. 4
26		50. 0. 1	51. 28. 59	52. 58. 3	54. 27. 12
27		61. 54. 50	63. 24. 48	64. 54. 56	66. 25. 14
28	Pollux.	31. 43. 45	33. 9. 42	34. 36. 20	36. 3. 34
29		43. 28. 3	44. 58. 29	46. 29. 24	48. 0. 46
30	Regulus.	18. 56. 23	20. 32. 28	22. 8. 58	23. 45. 53
31		31. 56. 22	33. 35. 40	35. 15. 22	36. 55. 28

Configurations of the SATELLITES of JUPITER at 8 o'th' Clock in the Evening.



NOVEMBER 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	Tu.	*All Saints.*
2	W.	
3	Th.	On mor. of All Souls, 1
4	F.	[ret.
5	Sa.	*Powder Plot,* 1605.
		——[Ter. begins.
6	*Su.*	*23d Su. aft. Tr.* Leon. M.
7	M.	*D. of Cumberland born.*
8	Tu.	
9	W.	
10	Th.	
11	F.	S. Martin. [C. Ter. div. m.
12	Sa.	On mor. of S. Mart. 2 ret.
13	*Su.*	*24th Su. aft. Tr.* Britius.
14	M.	
15	Tu.	Machutus.
16	W.	
17	Th.	Hugh Bp. of Lincoln.
18	F.	In 8 days of S. Martin,
19	Sa.	[3 ret.
20	*Su.*	*25th Sunday after Trinity.*
21	M.	[Edmund.
22	Tu.	Cecilia.
23	W.	St. Clement.
24	Th.	
25	F.	*D. of Glo. bo.* Cath. In 15
26	Sa.	[days of S. Mart. 4 ret.
27	*Su.*	*Advent Sunday.*
28	M.	
29	Tu.	[*Wales born* 1719.
30	W.	*St. Andrew. Prs. Dow. of*

Phaſes of the Moon.

	D.H.M.
New Moon ——	3. 14. 51
Firſt Quarter ——	10. 7. 7
Full Moon ——	17, 18. 16
Laſt Quarter ——	25. 22. 58

Other Phenomena,

D.

1. ☾ γ ♍ 3^h. 7′.
☾ θ ♍ 17^h. 21′,
5. ☾ φ Serpentar. 5^h. 55′.
7. ☿ ☌ ♏ diff. Lat. 13′.
9. ♀ λ ♍ diff. Lat. 46′,
11. ☾ λ ♒ 18^h. 1′,
12. ☾ φ ♒ 3^h. 56′.
16. ♀ α ♎ diff. Lat. 37′.
17. ☿ θ Ophiu. diff. Lat. 36′.
18. ☾ γ ♉ Im. 5^h. 51′. * ½′ S. of ☽'s cent. Em. 6^h. 48′. * 1′ S. of ☽'s cent.
☾ 1 ad ☌ ♉ 9^h. 15′.
☾ 2 ad ☌ ♉ 9^h. 45′.
☾ α ♉ Im. 15^h. 22′. * ½′ N. of ☽'s cent. Em. 16^h. 35′. * 1⅔′ N. of ☽'s cent.
21. ☉ enters ♐ at 16^h. 28′.
24. ☿ Stationary.
25. ☾ ρ ♌ 20^h. 50′.
26. ♀ κ ♎ diff. Lat. 46′.
☾ χ ♌ 12^h. 45′.
☾ σ ♌ 20^h. 48′.
27. ☾ β ♍ 12^h. 47′.
28. ♀ λ ♎ diff. Lat, 35′.
☾ υ ♍ 3^h. 11′.
☾ γ ♍ 12^h. 59′,
29. ☾ θ ♍ 3^h. 29′.
30. ♀ β ♏ diff. Lat, 24′.
☾ κ ♍ 7^h. 49′.

NOVEMBER 1774.

Days of the Month.	Days of the Week.	Sun's Longitude.	Sun's Right Asc. in Time.	Sun's Declin. South.	Equat. of Time. Sub.	Diff.
		S. D. M. S.	H. M. S.	D. M. S.	M. S.	S.
1	Tu.	7. 9. 9. 22	14.27. 2,0	14. 33. 46	16. 12,7	0,4
2	W.	7. 10. 9. 34	14.30.58,1	14. 52. 51	16. 13,1	0,4
3	Th.	7. 11. 9. 48	14.34.55,1	15. 11. 41	16. 12,7	1,2
4	F.	7. 12. 10. 4	14.38.52,9	15. 30. 17	16. 11,5	2,0
5	Sa.	7. 13. 10. 22	14.42.51,5	15. 48. 37	16. 9,5	2,9
6	*Su.*	7. 14. 10. 41	14.46.50,9	16. 6. 41	16. 6,6	3,8
7	M.	7. 15. 11. 2	14.50.51,2	16. 24. 29	16. 2,8	4,5
8	Tu.	7. 16. 11, 25	14.54.52,3	16. 42. 0	15. 58,3	5,4
9	W.	7. 17. 11. 49	14.58.54,3	16. 59. 14	15. 52,9	6,1
10	Th.	7. 18. 12. 14	15. 2.57,0	17. 16. 11	15. 46,8	7,0
11	F.	7. 19. 12. 40	15. 7. 0,6	17. 32. 49	15. 39,8	7,9
12	Sa.	7. 20. 13. 8	15.11. 5,0	17. 49. 10	15. 31,9	8,6
13	*Su.*	7. 21. 13. 37	15.15.10,2	18. 5. 12	15. 23,3	9,5
14	M.	7. 22. 14. 8	15.19.16,3	18. 20. 54	15. 13,8	10,3
15	Tu.	7. 23. 14. 40	15.23.23,2	18. 36. 17	15. 3,5	11,2
16	W.	7. 24. 15. 13	15.27.30,9	18. 51. 22	14. 52,3	11,9
17	Th.	7. 25. 15. 47	15.31.39,3	19. 6. 4	14. 40,4	12,8
18	F.	7. 26. 16. 23	15.35.48,8	19. 20. 26	14. 27,6	13,6
19	Sa.	7. 27. 17. 0	15.39.59,0	19. 34. 28	14. 14,0	14,5
20	*Su.*	7. 28. 17. 39	15.44.10,1	19. 48. 8	13. 59,5	15,2
21	M.	7. 29. 18. 20	15.48.21,9	20. 1. 27	13. 44,3	16,1
22	Tu.	8. 0. 19. 2	15.52.34,6	20. 14. 24	13. 28,2	16,8
23	W.	8. 1. 19. 45	15.56.48,0	20. 26. 58	13. 11,4	17,6
24	Th.	8. 2. 20. 31	16. 1. 2,3	20. 39. 10	12. 53,8	18,4
25	F.	8. 3. 21. 18	16. 5.17,3	20. 50. 59	12. 35,4	19,3
26	Sa.	8. 4. 22. 6	16. 9.33,1	21. 2. 24	12. 16,1	19,9
27	*Su.*	8. 5. 22. 56	16.13.49,7	21. 13. 26	11. 56,2	20,7
28	M.	8. 6. 23. 48	16.18. 7,0	21. 24. 3	11. 35,5	21,4
29	Tu.	8. 7. 24. 42	16.22.25,0	21. 34. 17	11. 14,1	22,1
30	W.	8. 8. 25. 36	16.26.43,7	21. 44. 5	10. 52,0	

NOVEMBER 1774.

Days.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	16. 11,1	1. 6,9	2. 30,4	9. 996245	5. 9. 58
7	16. 12,6	1. 7,6	2. 30,8	9. 995607	5. 9. 39
13	16. 13,9	1. 8,3	2. 31,3	9. 994996	5. 9. 20
19	16. 15,1	1. 9,0	2. 31,7	9. 994449	5. 9. 1
25	16. 16,2	1. 9,6	2. 32,0	9. 993986	5. 8. 42

Eclipſes of the SATELLITES of JUPITER.

I. Satellite. Immerſion.

Days	H. M. S.
2	17*55. 23
	Emerſions.
4	14*31. 42
6	9* 0. 13
8	3. 28. 43
9	21. 57. 13
11	16*25. 41
13	10*54. 4
15	5*22. 25
16	23. 50. 44
18	18. 19. 2
20	12*47. 18
22	7*15. 29
24	1. 43. 41
25	20. 11. 51
27	14*40. 0
29	9* 8. 6

II. Satellite. Immerſion.

Days	H. M. S.
1	1. 47. 44
	Emerſions.
4	17*24. 3
8	6*42. 52
11	20. 1. 34
15	9*20. 4
18	22. 38. 24
22	11*56. 35
26	1. 14. 39
29	14*32. 32

III. Satellite. Emerſions.

Days	H. M. S.
3	3. 17. 45
10	7*18. 17
17	11*18. 10
24	15*17. 32

IV. Satellite. Conj.

4	6*24	Inf.
12	16*17	Sup.
21	0. 34	Inf.
29	10*28	Sup.

NOVEMBER 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Paſſ. over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
	MERCURY. Greateſt Elong. 14^{d}.					
1	9. 11. 57	5. 49 S	7. 27. 39	2. 5 S	21. 41 S	1. 12
7	10. 0. 24	6. 44	8. 5. 50	2. 28	23. 44	1. 23
13	10. 21. 13	6. 57	8. 13. 14	2. 37	25. 0	1. 31
19	11. 15. 36	6. 4	8. 19. 2	2. 22	25. 22	1. 31
25	0. 14. 48	3. 37	8. 21. 31	1. 30	24. 41	1. 17
	VENUS.					
1	6. 0. 15	3. 16 N	6. 22. 55	1. 27 N	7. 34 S	23. 1
7	6. 9. 56	3. 4	7. 0. 26	1. 21	10. 22	23. 5
13	6. 19. 37	2. 47	7. 7. 58	1. 13	13. 1	23. 10
19	6. 29. 16	2. 25	7. 15. 30	1. 3	15. 29	23. 14
25	7. 8. 53	1. 59	7. 23. 2	0. 51	17. 43	23. 19
	MARS. □ 23^{d}. 6^{h}.					
1	3. 14. 6	1. 32 N	4. 21. 8	1. 39 N	16. 2 N	19. 8
7	3. 16. 53	1. 35	4. 24. 8	1. 46	15. 10	18. 56
13	3. 19. 40	1. 38	4. 27. 0	1. 54	14. 18	18. 43
19	3. 22. 25	1. 40	4. 29. 45	2. 2	13. 28	18. 28
25	3. 25. 9	1. 42	5. 2. 21	2. 10	12. 40	18. 13
	JUPITER. ☍ 2^{d}. 21^{h}.					
1	1. 10. 52	1. 7 S	1. 11. 17	1. 24 S	13. 54 N	12. 8
7	1. 11. 25	1. 7	1. 10. 28	1. 23	13. 40	11. 41
13	1. 11. 57	1. 6	1. 9. 40	1. 22	13. 26	11. 14
19	1. 12. 30	1. 6	1. 8. 55	1. 21	13. 12	10. 46
25	1. 13. 2	1. 5	1. 8. 13	1. 20	13. 0	10. 18
	SATURN.					
1	6. 0. 43	2. 20 N	6. 4. 8	2. 10 N	0. 21 N	21. 48
7	6. 0. 55	2. 21	6. 4. 47	2. 11	0. 6 N	21. 27
13	6. 1. 7	2. 21	6. 5. 23	2. 12	0. 7 S	21. 5
19	6. 1. 19	2. 21	6. 5. 58	2. 13	0. 20	20. 42
25	6. 1. 31	2. 21	6. 6. 30	2. 14	0. 32	20. 19

NOVEMBER 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M S.
1	Tu.	6. 5. 16. 33	6. 12. 2. 2	2. 3. 10 N	2.35.17 N
2	W.	6. 18. 53. 47	6. 25. 51. 44	3. 5. 34	3.33.31
3	Th.	7. 2. 55. 24	7. 10. 4. 22	3. 58. 32	4.20. 9
4	F.	7. 17. 17. 45	7. 24. 34. 48	4. 37. 49	4.51. 4
5	Sa.	8. 1. 54. 33	8. 9. 16. 1	4. 59. 39	5. 3.17
6	*Su.*	8. 16. 38. 9	8. 24. 0. 1	5. 1. 54	4.55.30
7	M.	9. 1. 20. 35	9. 8. 39. 13	4. 44. 15	4.28.21
8	Tu.	9. 15. 55. 2	9. 23. 7. 42	4. 8. 12	3.44.14
9	W.	10. 0. 16. 43	10. 7. 21. 52	3. 16. 53	2.46.47
10	Th.	10. 14. 23. 1	10. 21. 20. 11	2. 14. 22	1.40.15
11	F.	10. 28. 13. 17	11. 5. 2. 35	1. 5. 2 N	0.29.10 N
12	Sa.	11. 11. 48. 4	11. 18. 30. 7	0. 6. 46 S	0.42.15 S
13	*Su.*	11. 25. 8. 45	0. 1. 44. 14	1. 16. 49	1.50. 4
14	M.	0. 8. 16. 40	0. 14. 46. 14	2. 21. 32	2.50.54
15	Tu.	0. 21. 13. 2	0. 27. 37. 9	3. 17. 49	3.42. 0
16	W.	1. 3. 58. 38	1. 10. 17. 36	4. 3. 12	4.21.14
17	Th.	1. 16. 33. 56	1. 22. 47. 45	4. 35. 57	4.47.12
18	F.	1. 28. 59. 5	2. 5. 7. 57	4. 55. 1	4.59.17
19	Sa.	2. 11. 14. 21	2. 17. 18. 27	5. 0. 0	4.57.27
20	*Su.*	2. 23. 20. 23	2. 29. 20. 11	4. 51. 29	4.42.19
21	M.	3. 5. 18. 18	3. 11. 14. 54	4. 30. 4	4.14.56
22	Tu.	3. 17. 10. 14	3. 23. 4. 56	3. 57. 0	3.36.37
23	W.	3. 28. 59. 14	4. 4. 53. 46	3. 13. 52	2.49. 0
24	Th.	4. 10. 49. 8	4. 16. 45. 50	2. 22. 11	1.53.46
25	F.	4. 22. 44. 37	4. 28. 46. 4	1. 23. 52	0.52.49 S
26	Sa.	5. 4. 50. 52	5. 10. 59. 50	0. 20. 52 S	0.11.40 N
27	*Su.*	5. 17. 13. 32	5. 23. 32. 35	0. 44. 30 N	1.17.14
28	M.	5. 29. 57. 40	6. 6. 29. 19	1. 49. 31	2.20.51
29	Tu.	6. 13. 7. 56	6. 19. 53. 50	2. 50. 52	3.18.58
30	W.	6. 26. 47. 10	7. 3. 47. 56	3. 44. 42	4. 7.29

NOVEMBER 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſc. at Midn.	☽'s Declination at Noon.	☽'s Declination at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	Tu.	28	22. 41	185. 39	192. 5	0. 13 S	2. 23 S
2	W.	29	23. 32	198. 37	205. 17	4. 33	6. 41
3	Th.	1	☌	212. 5	219. 3	8. 46	10. 44
4	F.	2	0. 27	226. 10	233. 26	12. 34	14. 14
5	Sa.	3	1. 24	240. 51	248. 23	15. 40	16. 52
6	*Su.*	4	2. 23	256. 1	263. 42	17. 47	18. 24
7	M.	5	3. 23	271. 25	279. 7	18. 43	18. 43
8	Tu.	6	4. 22	286. 45	294. 19	18. 24	17. 48
9	W.	7	5. 20	301. 45	309. 2	16. 54	15. 45
10	Th.	8	6. 15	316. 11	323. 10	14. 23	12. 49
11	F.	9	7. 8	330. 0	336. 42	11. 5	9. 13
12	Sa.	10	7. 58	343. 16	349. 42	7. 15	5. 12
13	*Su.*	11	8. 46	356. 3	2. 19	3. 6 S	0. 59 S
14	M.	12	9. 33	8. 32	14. 42	1. 7 N	3. 12 N
15	Tu.	13	10. 19	20. 51	26. 59	5. 14	7. 11
16	W.	14	11. 6	33. 7	39. 16	9. 2	10. 47
17	Th.	15	11. 53	45. 26	51. 38	12. 24	13. 51
18	F.	16	12. 40	57. 52	64. 8	15. 9	16. 16
19	Sa.	17	13. 28	70. 24	76. 42	17. 11	17. 55
20	*Su.*	18	14. 15	83. 0	89. 18	18. 27	18. 46
21	M.	19	15. 3	95. 35	101. 51	18. 52	18. 45
22	Tu.	20	15. 50	108. 5	114. 17	18. 27	17. 56
23	W.	21	16. 36	120. 26	126. 32	17. 13	16. 20
24	Th.	22	17. 21	132. 36	138. 38	15. 15	14. 1
25	F.	23	18. 6	144. 38	150. 36	12. 37	11. 5
26	Sa.	24	18. 51	156. 34	162. 32	9. 25	7. 38
27	*Su.*	25	19. 37	168. 32	174. 35	5. 44	3. 45 N
28	M.	26	20. 23	180. 42	186. 53	1. 41 N	0. 25 S
29	Tu.	27	21. 13	193. 11	199. 37	2. 34 S	4. 43
30	W.	28	22. 4	206. 13	212. 58	6. 51	8. 55

NOVEMBER 1774.

Days of the Month.	Days of the Week.	Semidr. ☽ at Noon.	Semidr. ☽ at Midnight.	Hor. Par. ☽ at Noon.	Hor. Par. ☽ at Midnight.	Proport. Logar. at Noon.	Proport. Logar. at Midn.
		M. S.	M. S.	M. S.	M. S.		
1	Tu.	15. 44	15. 50	57. 45	58. 9	4937	4907
2	W.	15. 57	16. 3	58. 33	58. 55	4877	4850
3	Th.	16. 9	16. 14	59. 16	59. 34	4824	4802
4	F.	16. 18	16. 22	59. 50	60. 3	4783	4768
5	Sa.	16. 24	16. 26	60. 12	60. 18	4757	4750
6	*Su.*	16. 26	16. 26	60. 20	60. 20	4747	4747
7	M.	16. 25	16. 23	60. 16	60. 9	4752	4760
8	Tu.	16. 21	16. 18	60. 1	59. 50	4770	4783
9	W.	16. 15	16. 11	59. 37	59. 23	4799	4816
10	Th.	16. 7	16. 3	59. 8	58. 53	4834	4853
11	F.	15. 58	15. 54	58. 37	58. 20	4872	4893
12	Sa.	15. 49	15. 45	58. 4	57. 47	4913	4934
13	*Su.*	15. 40	15. 36	57. 31	57. 15	4955	4975
14	M.	15. 32	15. 28	56. 59	56. 44	4995	5014
15	Tu.	15. 23	15. 19	56. 28	56. 14	5035	5053
16	W.	15. 15	15. 12	55. 59	55. 45	5072	5090
17	Th.	15. 8	15. 4	55. 32	55. 19	5107	5124
18	F.	15. 1	14. 58	55. 7	54. 56	5140	5154
19	Sa.	14. 55	14. 53	54. 46	54. 37	5167	5179
20	*Su.*	14. 51	14. 49	54. 29	54. 23	5190	5198
21	M.	14. 48	14. 47	54. 18	54. 15	5205	5209
22	Tu.	14. 46	14. 47	54. 13	54. 14	5211	5210
23	W.	14. 48	14. 49	54. 17	54. 22	5206	5199
24	Th.	14. 51	14. 54	54. 29	54. 39	5190	5177
25	F.	14. 57	15. 1	54. 51	55. 6	5161	5141
26	Sa.	15. 5	15. 11	55. 23	55. 43	5119	5093
27	*Su.*	15. 16	15. 23	56. 4	56. 28	5065	5035
28	M.	15. 30	15. 37	56. 53	57. 20	5003	4968
29	Tu.	15. 45	15. 53	57. 48	58. 16	4933	4898
30	W.	16. 0	16. 8	58. 44	59. 11	4864	4831

Diſtances of ☽'s Center from Stars, and from ☉ eaſt of her.

Days.	Stars Names.	Noon. D. M. S.	3 Hours. D. M. S.	6 Hours. D. M. S.	9 Hours. D. M. S.
5	β Capricorni.	58. 45. 53	56. 56. 5	55. 6. 13	53. 16. 17
6		44. 6. 5	42. 16. 2	40. 26. 1	38. 36. 3
7		29. 27. 25			
7	α Pegaſi.	78. 4. 28	76. 21. 59	74. 39. 43	72. 57. 42
8		64. 32. 17	62. 52. 15	61. 12. 41	59. 33. 36
9		51. 26. 20	49. 50. 49	48. 16. 5	46. 42. 10
10		39. 7. 42	37. 40. 29	36. 14. 47	34. 50. 46
11	α Arietis.	66. 28. 34	64. 49. 13	63. 10. 13	61. 31. 33
12		53. 23. 48	51. 47. 25	50. 11. 28	48. 35. 57
13		40. 46. 14			
13	Aldebaran.	71. 27. 56	69. 48. 26	68. 9. 8	66. 30. 4
14		58. 17. 48	56. 39. 57	55. 2. 17	53. 24. 49
15		45. 20. 23	43. 44. 4	42. 7. 56	40. 32. 0
16		32. 35. 5	31. 0. 14	29. 25. 34	27. 51. 4
17		20. 1. 23	18. 27. 59	16. 54. 45	15. 21. 42
18	Pollux.	52. 20. 6	50. 50. 29	49. 21. 9	47. 52. 5
19		40. 31. 16	39. 4. 7	37. 37. 22	36. 11. 0
20	Regulus.	63. 30. 29	62. 0. 42	60. 31. 1	59. 1. 27
21		51. 35. 1	50. 5. 59	48. 37. 2	47. 8. 10
22		39. 44. 45	38. 16. 10	36. 47. 37	35. 19. 5
23		27. 56. 40	26. 28. 9	24. 59. 37	23. 31. 3
24		16. 7. 36			
24	Spica ♍	69. 49. 9	68. 20. 23	66. 51. 31	65. 22. 32
25		57. 55. 39	56. 25. 50	54. 55. 51	53. 25. 41
26		45. 52. 3			
23	The Sun.		120. 56. 28	119. 35. 48	118. 15. 4
24		111. 30. 13	110. 8. 58	108. 47. 37	107. 26. 8
25		100. 36. 29	99. 14. 3	97. 51. 26	96. 28. 37
26		89. 31. 14	88. 7. 0	86. 42. 30	85. 17. 44
27		78. 9. 28	76. 42. 53	75. 15. 57	73. 48. 41
28		66. 26. 54	64. 57. 25	63. 27. 32	61. 57. 15
29		54. 19. 49	52. 47. 6	51. 13. 58	49. 40. 27
30		41. 46. 41	40. 10. 45	38. 34. 27	

Diſtances of ☽'s Center from Stars, and from ⊙ eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
5	β Capricorni.	51. 26. 17	49. 36. 15	47. 46. 12	45. 56. 8
6		36. 46. 8	34. 56. 18	33. 6. 33	31. 16. 56
7	α Pegaſi.	71. 15. 58	69. 34. 31	67. 53. 25	66. 12. 41
8		57. 54. 59	56. 16. 55	54. 39. 26	53. 2. 33
9		45. 9. 9	43. 37. 6	42. 6. 7	40. 36. 17
10		33. 28. 34			
10	α Arietis.	73. 8. 56	71. 28. 25	69. 48. 10	68. 8. 13
11		59. 53. 14	58. 15. 18	56. 37. 44	55. 0. 34
12		47. 0. 54	45. 26. 21	43. 52. 22	42. 18. 59
13	Aldebaran.	64. 51. 12	63. 12. 33	61. 34. 6	59. 55. 51
14		51. 47. 33	50. 10. 28	48. 33. 35	46. 56. 53
15		38. 56. 15	37. 20. 41	35. 45. 18	34. 10. 6
16		26. 16. 46	24. 42. 39	23. 8. 43	21. 34. 58
17		13. 48. 49			
17	Pollux.	58. 21. 0	56. 50. 25	55. 20. 5	53. 49. 58
18		46. 23. 18	44. 54. 48	43. 26. 37	41. 58. 47
19		34. 45. 2			
19	Regulus.	69. 30. 59	68. 0. 39	66. 30. 27	65. 0. 24
20		57. 32. 0	56. 2. 37	54. 33. 20	53. 4. 8
21		45. 39. 22	44. 10. 39	42. 41. 58	41. 13. 20
22		33. 50. 35	32. 22. 6	30. 53. 38	29. 25. 9
23		22. 2. 27	20. 33. 49	19. 5. 7	17. 36. 23
24	Spica ♍	63. 53. 26	62. 24. 12	60. 54. 50	59. 25. 18
25		51. 55. 21	50. 24. 49	48. 54. 6	47. 23. 11
23	The Sun.	116. 54. 16	115. 33. 23	114. 12. 25	112. 51. 22
24		106. 4. 32	104. 42. 46	103. 20. 50	101. 58. 44
25		95. 5. 36	93. 42. 22	92. 18. 54	90. 55. 11
26		83. 52. 41	82. 27. 20	81. 1. 41	79. 35. 44
27		72. 21. 4	70. 53. 5	69. 24. 44	67. 56. 0
28		60. 26. 35	58. 55. 30	57. 24. 1	55. 52. 7
29		48. 6. 30	46. 32. 8	44. 57. 23	43. 22. 14

NOVEMBER 1774.

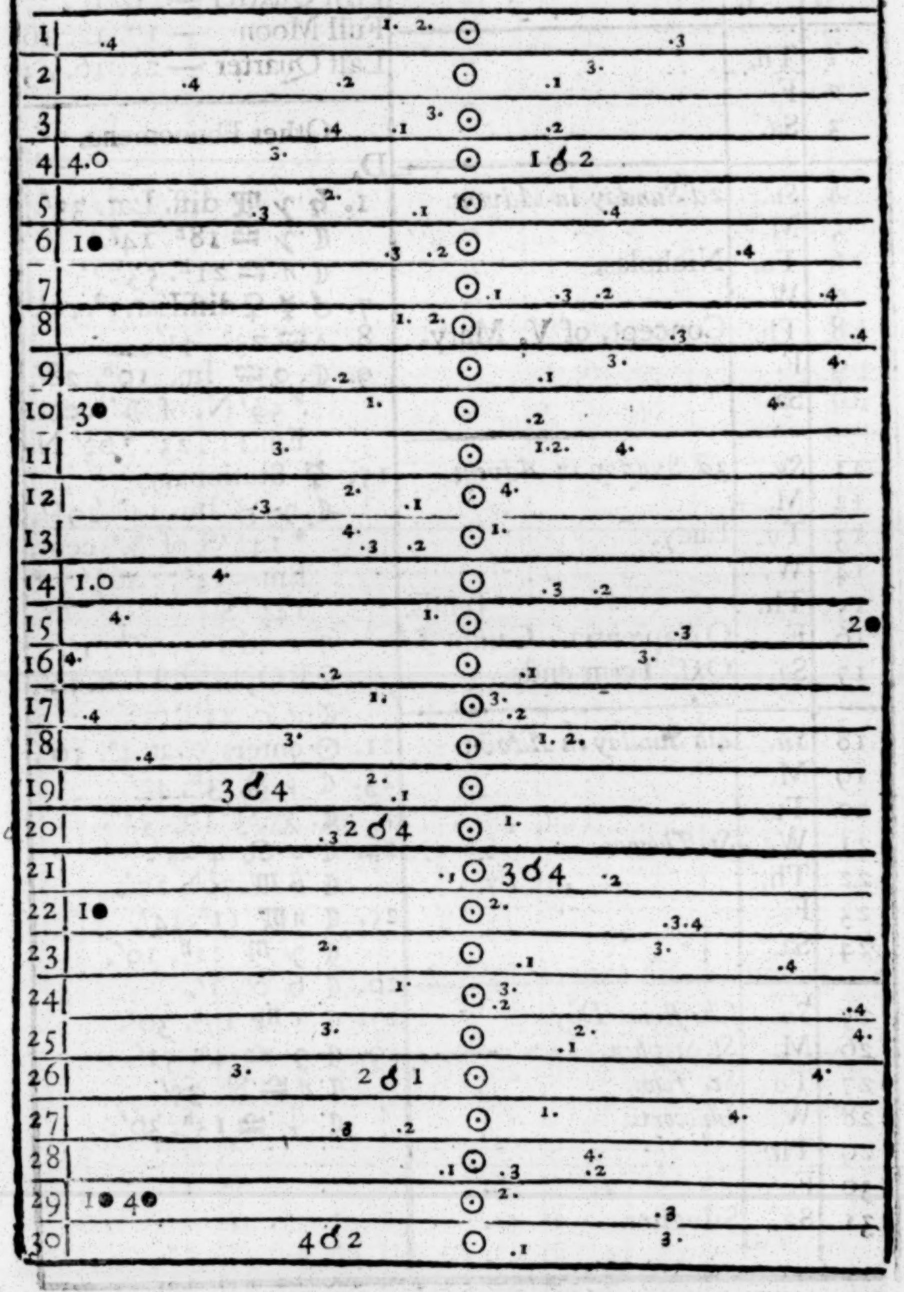
Diſtances of ☽'s Center from Stars, and from ☉ weſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Regulus.	38. 35. 58	40. 16. 53	41. 58. 12	43. 39. 53
2		52. 13. 59	53. 57. 55	55. 42. 12	57. 26. 52
7	The Sun.	46. 20. 49	48. 2. 14	49. 43. 33	51. 24. 47
8		59. 48. 51	61. 29. 13	63. 9. 24	64. 49. 25
9		73. 6. 37	74. 45. 26	76. 24. 2	78. 2. 25
10		86. 10. 57	87. 47. 59	89. 24. 47	91. 1. 20
11		99. 0. 31	100. 35. 39	102. 10. 34	103. 45. 14
12		111. 34. 56	113. 8. 12	114. 41. 14	116. 14. 2
10	β Capricorni.	13. 39. 58	15. 24. 28	17. 8. 47	18. 52. 55
11		27. 30. 36	29. 13. 32	30. 56. 14	32. 38. 44
12		41. 7. 44	42. 48. 53	44. 29. 49	46. 10. 33
13	α Aquilæ.	61. 59. 41	63. 26. 22	64. 53. 13	66. 20. 11
14		73. 36. 2	75. 3. 16	76. 30. 27	77. 57. 36
15	Fomalhaut.	52. 12. 36	53. 37. 47	55. 3. 13	56. 28. 52
16		63. 39. 25	65. 5. 49	66. 32. 16	67. 58. 44
17	α Pegaſi.	60. 15. 14	61. 41. 3	63. 6. 54	64. 32. 48
18		71. 42. 22	73. 8. 12	74. 33. 59	75. 59. 42
19	α Arietis.	39. 31. 8	40. 55. 22	42. 19. 51	43. 44. 33
20		50. 50. 14	52. 15. 38	53. 41. 6	55. 6. 37
21		62. 14. 47			
21	Aldebaran.	28. 33. 44	30. 2. 48	31. 31. 48	33. 0. 43
22		40. 24. 27	41. 53. 5	43. 21. 42	44. 50. 19
23		52. 13. 17	53. 41. 56	55. 10. 37	56. 39. 22
24		64. 4. 10	65. 33. 24	67. 2. 43	68. 32. 10
25	Pollux.	33. 32. 54	34. 58. 28	36. 24. 34	37. 51. 8
26		45. 10. 44	46. 39. 56	48. 9. 32	49. 39. 33
27		57. 15. 36			
27	Regulus.	20. 31. 27	22. 5. 46	23. 40. 28	25. 15. 33
28		33. 16. 47	34. 54. 13	36. 32. 5	38. 10. 21
29		46. 28. 5	48. 8. 56	49. 50. 13	51. 31. 57
30		60. 7. 17	61. 51. 41	63. 36. 31	65. 21. 48
D. 1		74. 14. 33			

Diſtances of ☽'s Center from Stars, and from ☉ weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Regulus.	45. 21. 58	47. 4. 25	48. 47. 14	50. 30. 25
2		59. 11. 53			
6	The Sun.	39. 34. 38	41. 16. 14	42. 57. 48	44. 39. 20
7		53. 5. 54	54. 46. 51	56. 27. 40	58. 8. 20
8		66. 29. 16	68. 8. 54	69. 48. 21	71. 27. 35
9		79. 40. 35	81. 18. 31	82. 56. 13	84. 33. 42
10		92. 37. 40	94. 13. 44	95. 49. 34	97. 25. 10
11		105. 19. 40	106. 53. 50	108. 27. 46	110. 1. 28
12		117. 46. 37	119. 18. 57	120. 51. 4	
10	β Capricorni.	20. 36. 51	22. 20. 35	24. 4. 8	25. 47. 28
11		34. 21. 0	36. 3. 1	37. 44. 48	39. 26. 23
12		47. 51. 6			
12	α Aquilæ.	56. 45. 17	57. 40. 59	59. 6. 58	60. 33. 13
13		67. 47. 15	69. 14. 23	70. 41. 34	72. 8. 47
14		79. 24. 43			
14	Fomalhaut.	46. 35. 24	47. 59. 5	49. 23. 12	50. 47. 43
15		57. 54. 43	59. 20. 43	60. 46. 50	62. 13. 4
16		69. 25. 12			
16	α Pegaſi.	54. 32. 54	55. 58. 18	57. 23. 49	58. 49. 28
17		65. 58. 44	67. 24. 40	68. 50. 35	70. 16. 29
18		77. 25. 20			
18	α Arietis.	33. 57. 42	35. 20. 26	36. 43. 37	38. 7. 12
19		45. 9. 26	46. 34. 28	47. 59. 37	49. 24. 53
20		56. 32. 11	57. 57. 48	59. 23. 26	60. 49. 6
21	Aldebaran.	34. 29. 34	35. 58. 21	37. 27. 5	38. 55. 48
22		46. 18. 54	47. 47. 29	49. 16. 4	50. 44. 40
23		58. 8. 10	59. 37. 3	61. 6. 0	62. 35. 2
24		70. 1. 44			
24	Pollux.	27. 56. 36	29. 19. 41	30. 43. 27	32. 7. 52
25		39. 18. 11	40. 45. 40	42. 13. 36	43. 41. 57
26		51. 9. 59	52. 40. 48	54. 12. 1	55. 43. 37
27	Regulus.	26. 51. 1	28. 26. 52	30. 3. 6	31. 39. 45
28		39. 49. 2	41. 28. 9	43. 7. 42	44. 47. 40
29		53. 14. 8	54. 56. 45	56. 39. 49	58. 23. 20
30		67. 7. 30	68. 53. 38	70. 40. 11	72. 27. 10

Configurations of the SATELLITES of JUPITER at 7 o' th' Clock in the Evening.



DECEMBER 1774.

Days of the Month.	Days of the Week.	Sundays, Holidays, &c.
1	Th.	
2	F.	
3	Sa.	
4	*Su.*	*2d Sunday in Advent.*
5	M.	
6	Tu.	Nicholas.
7	W.	
8	Th.	Concept. of V. Mary.
9	F.	
10	Sa.	
11	*Su.*	*3d Sunday in Advent.*
12	M.	
13	Tu.	Lucy.
14	W.	
15	Th.	[ends.
16	F.	O Sapientia. Camb. T.
17	Sa.	Oxf. Term ends.
18	*Su.*	*4th Sunday in Advent.*
19	M.	
20	Tu.	
21	W.	*St. Thomas.*
22	Th.	
23	F.	
24	Sa.	
25	*Su.*	*Chriſtmas-Day.*
26	M.	*St. Stephen.*
27	Tu.	*St. John.*
28	W.	*Innocents.*
29	Th.	
30	F.	
31	Sa.	Silveſter.

Phaſes of the Moon.

	D.	H.	M.
New Moon —	3.	1.	44
Firſt Quarter —	9.	17.	5
Full Moon —	17.	12.	16
Laſt Quarter —	25.	16.	43

Other Phenomena.

D.
1. ♄ γ ♍ diff. Lat. 33′.
☾ γ ♎ 18^h. 14′.
☾ ν ♎ 21^h. 53′.
7. ☌ ☿ ♀ diff. Lat. 1°. 55′.
8. λ ♒ 23^h. 41′.
9. ☾ φ ♒ Im. 10^h. 28′.
* $5\frac{1}{2}'$ N. of ☽'s cent.
Em. 11^h. 23′. * $6\frac{1}{2}'$ N.
15. ☿ Stationary.
☾ γ ♉ Im. 14^h. $29\frac{1}{2}'$.
* $14\frac{1}{2}'$ S. of ☽'s cent.
Em. 14^h. $46\frac{1}{2}'$. *
$14\frac{1}{2}'$ S.
☾ 2 ad δ ♉ 16^h. 1′.
♀ B Ophi. diff. Lat. 59′.
☾ α ♉ 21^h. 17′.
21. ☉ enters ♑ at 4^h. 50′.
23. ☾ ρ ♌ 3^h. 42′.
☾ χ ♌ 19^h. 52′.
24. ☾ σ ♌ 4^h. 5′.
☾ β ♍ 20^h. 27′.
25. ☾ ν ♍ 11^h. 14′.
☾ γ ♍ 21^h. 19′.
26. ☾ ♄ 0^h. 1′.
27. ☾ κ ♍ 17^h. 30′.
29. ☾ γ ♎ 4^h. 51′.
☾ ν ♎ 8^h. 35′.
☾ ψ ♎ 13^h. 36′.

DECEMBER 1774.

Days of the Month.	Days of the Week.	Sun's Longitude. S. D. M. S.	Sun's Right Asc. in Time. H. M. S.	Sun's Declin. South. D. M. S.	Equat. of Time. Sub. M. S.	Diff. S.
1	Th.	8. 9. 26. 32	16.31. 3,1	21. 53. 29	10. 29,1	23,4
2	F.	8. 10. 27. 30	16.35.23,2	22. 2. 27	10, 5,7	24,0
3	Sa.	8. 11. 28. 28	16.39.43,8	22. 11. 0	9,41,7	24,6
4	*Su.*	8. 12. 29. 27	16.44. 5,1	22. 19. 7	9,17,1	25,2
5	M.	8. 13. 30. 28	16.48.26,9	22. 26. 48	8. 51,9	25,7
6	Tu.	8. 14. 31. 29	16.52.49,2	22. 34. 3	8. 26,2	26,2
7	W.	8. 15. 32. 30	16.57.12,0	22. 40. 50	8. 0,0	26,6
8	Th.	8. 16. 33. 33	17. 1.35,3	22. 47. 12	7. 33,4	27,1
9	F.	8. 17. 34. 36	17. 5.59,1	22. 53. 6	7. 6,3	27,5
10	Sa.	8. 18. 35. 39	17.10.23,1	22. 58. 33	6. 38,8	27,9
11	*Su.*	8. 19. 36. 43	17.14.47,7	23. 3. 33	6. 10,9	28,2
12	M.	8. 20. 37. 47	17.19.12,5	23. 8. 5	5. 42,7	28,6
13	Tu.	8. 21. 38. 51	17.23.37,6	23. 12. 9	5. 14,1	28,8
14	W.	8. 22. 39. 56	17.28. 3,0	23. 15. 46	4. 45,3	29,0
15	Th.	8. 23. 41. 1	17.32.28,7	23. 18. 55	4. 16,3	29,2
16	F.	8. 24. 42. 7	17.36.54,6	23. 21. 36	3. 47,1	29,4
17	Sa.	8. 25. 43. 13	17.41.20,7	23. 23. 48	3. 17,7	29,6
18	*Su.*	8. 26. 44. 19	17.45.46,9	23. 25. 33	2. 48,1	29,7
19	M.	8. 27. 45. 26	17.50.13,3	23. 26. 49	2. 18,4	29,9
20	Tu.	8. 28. 46. 33	17.54.39,8	23. 27. 38	1. 48,5	30,0
21	W.	8. 29. 47. 42	17.59. 6,4	23. 27. 57	1. 18,5	30,0
22	Th.	9. 0. 48. 51	18. 3.33,0	23. 27. 49	0. 48,5	30,0
23	F.	9. 1. 50. 0	18. 7.59,7	23. 27. 12	0. 18,5	30,0
24	Sa.	9. 2. 51. 10	18.12.26,3	23. 26. 7	Ad: 11,5	29,9
25	*Su.*	9. 3. 52. 20	18.16.52,9	23. 24. 34	0. 41,4	29,9
26	M.	9. 4. 53. 31	18.21.19,4	23. 22. 32	1. 11,3	29,8
27	Tu.	9. 5. 54. 43	18.25.45,7	23. 20. 2	1. 41,1	29,6
28	W.	9. 6. 55. 54	18.30.11,9	23. 17. 4	2,10,7	29,3
29	Th.	9. 7. 57. 7	18.34.38,0	23. 13. 38	2,40,0	29,2
30	F.	9. 8. 58. 19	18.39. 3,8	23. 9. 44	3, 9,2	29,0
31	Sa.	9. 9. 59. 32	18.43.29,4	23. 5. 22	3. 38,2	

DECEMBER 1774.

Days.	Semidiameter of the Sun.	Time of D° paſſing the Meridian.	Hourly Motion of the Sun.	Logarithm of the Sun's Diſtance.	Place of the Moon's Node.
	M. S.	M. S.	M. S.		S. D. M.
1	16. 17,1	1. 10,2	2. 32,2	9. 993592	5. 8. 22
7	16. 17,9	1. 10,7	2. 32,5	9. 993248	5. 8. 3
13	16. 18,5	1. 11,0	2. 32,7	9. 992959	5. 7. 44
19	16. 19,0	1. 11,1	2. 32,8	9. 992765	5. 7. 25
25	16. 19,2	1. 11,1	2. 32,9	9. 992671	5. 7. 6

Eclipſes of the SATELLITES of JUPITER.

I. Satellite. Emerſions.	
Days	H. M. S.
1	3. 36. 13
2	22. 4. 16
4	16. 32. 19
6	11* 0. 17
8	5*28. 19
9	23. 56. 16
11	18. 24. 17
13	12*52. 13
15	7*20. 12
17	1. 48. 7
18	20. 16. 7
20	14. 44. 4
22	9*12. 1
24	3. 39. 57
25	22. 7. 51
27	16. 35. 53
29	11* 3. 52
31	5*31. 52

II. Satellite. Emerſions.	
Days	H. M. S.
3	3. 50. 17
6	17. 7. 56
10	6*25. 31
13	19. 43. 2
17	9* 0. 25
20	22. 17. 44
24	11*35. 4
28	0. 52. 27
31	14. 9. 46

III. Satellite.		
Days	H. M. S.	
1	19. 16. 21	E
8	23. 14. 53	E
16	1. 40. 38	I
16	3. 13. 10	E
23	5*38. 46	I
23	7*11. 26	E
30	9*36. 59	I
30	11* 9. 45	E

IV. Satellite. Conj.		
7	19. 32	Inf.
16	4. 37	Sup.
24	13*40	Inf.

DECEMBER 1774.

Days.	Heliocentric Longitude.	Heliocentric Latitude.	Geocentric Longitude.	Geocentric Latitude.	Declination.	Passage over Merid.
	S. D. M.	D. M.	S. D. M.	D. M.	D. M.	H. M.
	MERCURY. Inf. ☌ 4^d. $20\frac{1}{2}^h$. Gr. El. 24^d.					
1	1. 19. 16	0. 25 N	8. 18. 17	0. 11 N	22. 46 S	0. 38
7	2. 26. 54	4. 36	8. 10. 28	2. 4	20. 0	23. 32
13	4. 3. 3	6. 49	8. 5. 29	2. 53	18. 24	22. 49
19	5. 4. 9	6. 38	8. 6. 34	2. 38	18. 50	22. 29
25	5. 29. 51	5. 2	8. 11. 39	1. 55	20. 19	22. 25
	VENUS.					
1	7. 18. 29	1. 30 N	8. 0. 35	0. 39 N	19. 40 S	23. 24
7	7. 28. 3	0. 58	8. 8. 8	0. 25	21. 17	23. 29
13	8. 7. 36	0. 25 N	8. 15. 41	0. 11 N	22. 31	23. 35
19	8. 17. 7	0. 9 S	8. 23. 14	0. 4 S	23. 21	23. 41
25	8. 26. 38	0. 42	9. 0. 48	0. 18	23. 46	23. 48
	MARS.					
1	3. 27. 53	1. 44 N	5. 4. 47	2. 19 N	11. 55 N	17. 57
7	4. 0. 35	1. 46	5. 7. 0	2. 28	11. 15	17. 39
13	4. 3. 17	1. 47	5. 9. 1	2. 38	10. 38	17. 21
19	4. 5. 58	1. 48	5. 10. 48	2. 48	10. 7	17. 1
25	4. 8. 38	1. 49	5. 12. 16	2. 58	9. 42	16. 39
	JUPITER.					
1	1. 13. 35	1. 5 S	1. 7. 36	1. 18 S	12. 49 N	9. 50
7	1. 14. 7	1. 4	1. 7. 4	1. 17	12. 41	9. 22
13	1. 14. 40	1. 4	1. 6. 39	1. 15	12. 34	8. 54
19	1. 15. 12	1. 4	1. 6. 21	1. 14	12. 30	8. 26
25	1. 15. 45	1. 3	1. 6. 9	1. 12	12. 28	7. 59
	SATURN. □ 29^d. $15\frac{1}{2}^h$.					
1	6. 1. 43	2. 21 N	6. 6. 59	2. 16 N	0. 42 N	19. 55
7	6. 1. 55	2. 22	6. 7. 26	2. 17	0. 51	19. 31
13	6. 2. 7	2. 22	6. 7. 49	2. 18	0. 59	19. 5
19	6. 2. 19	2. 22	6. 8. 9	2. 20	1. 6	18. 40
25	6. 2. 31	2. 22	6. 8. 26	2. 22	1. 11	18. 15

DECEMBER 1774.

Days of the Month.	Days of the Week.	Moon's Longitude at Noon.	Moon's Longitude at Midnight.	Moon's Latitude at Noon.	Moon's Latitude at Midn.
		S. D. M. S.	S. D. M. S.	D. M. S.	D.M.S.
1	Th.	7. 10. 55. 55	7. 18. 10. 36	4. 26. 46 N	4.42. 8 N
2	F.	7. 25. 31. 23	8. 2. 57. 21	4. 53. 1	4.59. 5
3	Sa.	8. 10. 27. 16	8. 18. 0. 7	5. 0. 4	4.55.51
4	*Su.*	8. 25. 34. 25	9. 3. 8. 54	4. 46. 24	4.31.55
5	M.	9. 10. 42. 8	9. 18. 13. 0	4. 12. 41	3.49. 5
6	Tu.	9. 25. 40. 21	10. 3. 3. 21	3. 21. 43	2.51.14
7	W.	10. 10. 21. 23	10. 17. 33. 57	2. 18. 10	1.43.18
8	Th.	10. 24. 40. 39	11. 1. 41. 37	1. 7. 13 N	0.30.33 N
9	F.	11. 8. 36. 47	11. 15. 26. 14	0. 6. 4 S	0.42. 6 S
10	Sa.	11. 22. 10. 21	11. 28. 49. 21	1. 17. 6	1.50.35
11	*Su.*	0. 5. 23. 41	0. 11. 53. 36	2. 22. 9	2.51.33
12	M.	0. 18. 19. 34	0. 24. 41. 55	3. 18. 23	3.42.29
13	Tu.	1. 1. 0. 57	1. 7. 16. 59	4. 3. 35	4.21.34
14	W.	1. 13. 30. 22	1. 19. 41. 17	4. 36. 18	4.47.39
15	Th.	1. 25. 49. 59	2. 1. 56. 33	4. 55. 32	5. 0. 0
16	F.	2. 8. 1. 16	2. 14. 4. 19	5. 0. 59	4.58.36
17	Sa.	2. 20. 5. 41	2. 26. 5. 37	4. 52. 49	4.43.50
18	*Su.*	3. 2. 4. 5	3. 8. 1. 27	4. 31. 45	4.16.42
19	M.	3. 13. 57. 43	3. 19. 53. 5	3. 58. 50	3.38.27
20	Tu.	3. 25. 47. 59	4. 1. 42. 26	3. 15. 41	2.50.46
21	W.	4. 7. 36. 55	4. 13. 31. 49	2. 24. 0	1.55.36
22	Th.	4. 19. 27. 29	4. 25. 24. 28	1. 25. 48	0.55. 0 S
23	F.	5. 1. 23. 16	5. 7. 24. 30	0. 23. 19 S	0. 8.51 N
24	Sa.	5. 13. 28. 38	5. 19. 36. 29	0. 41. 10 N	1.13.24
25	*Su.*	5. 25. 48. 31	6. 2. 5. 27	1. 45. 7	2.16. 1
26	M.	6. 8. 27. 53	6. 14. 56. 22	2. 45. 40	3.13.40
27	Tu.	6. 21. 31. 28	6. 28. 13. 37	3. 39. 33	4. 2.56
28	W.	7. 5. 3. 8	7. 12. 0. 16	4. 23. 18	4.40.10
29	Th.	7. 19. 4. 52	7. 26. 16. 51	4. 53. 5	5. 1.37
30	F.	8. 3. 35. 48	8. 11. 1. 8	5. 5. 23	5. 4. 6
31	Sa.	8. 18. 31. 52	8. 26. 6. 55	4. 57. 36	4.45.50

DECEMBER 1774.

Days of the Month.	Days of the Week.	☽'s Age.	☽'s Paſsage over Merid.	☽'s Right Aſcen. at Noon.	☽'s Right Aſcen. at Midn.	☽'s Declinat. at Noon.	☽'s Declinat. at Midn.
			H. M.	D. M.	D. M.	D. M.	D. M.
1	Th.	29	22. 59	219. 55	227. 3	10. 54 S	12. 45 S
2	F.	30	23. 59	234. 23	241. 54	14. 25	15. 53
3	Sa.	1	☌	249. 36	257. 25	17. 5	18. 1
4	*Su.*	2	1. 0	265. 21	273. 19	18. 37	18. 54
5	M.	3	2. 2	281. 17	289. 12	18. 50	18. 26
6	Tu.	4	3. 2	297. 0	304. 40	17. 44	16. 43
7	W.	5	4. 0	312. 10	319. 29	15. 27	13. 57
8	Th.	6	4. 55	326. 36	333. 31	12. 15	10. 25
9	F.	7	5. 47	340. 17	346. 52	8. 27	6. 24
10	Sa.	8	6. 36	353. 19	359. 39	4. 17	2. 10 S
11	*Su.*	9	7. 23	5. 53	12. 3	0. 2 S	2. 4 N
12	M.	10	8. 8	18. 10	24. 15	4. 8 N	6. 8
13	Tu.	11	8. 54	30. 18	36. 22	8. 2	9. 50
14	W.	12	9. 40	42. 27	48. 34	11. 31	13. 3
15	Th.	13	10. 26	54. 42	60. 53	14. 27	15. 40
16	F.	14	11. 12	67. 5	73. 20	16. 43	17. 34
17	Sa.	15	12. 0	79. 36	85. 53	18. 14	18. 41
18	*Su.*	16	12. 47	92. 11	98. 28	18. 55	18. 57
19	M.	17	13. 34	104. 44	110. 58	18. 46	18. 23
20	Tu.	18	14. 20	117. 9	123. 18	17. 48	17. 2
21	W.	19	15. 5	129. 23	135. 26	16. 4	14. 56
22	Th.	20	15. 51	141. 25	147. 22	13. 39	12. 12
23	F.	21	16. 35	153. 17	159. 10	10. 38	8. 56
24	Sa.	22	17. 19	165. 3	170. 56	7. 8	5. 15
25	*Su.*	23	18. 3	176. 51	182. 49	3. 17 N	1. 15 N
26	M.	24	18. 49	188. 52	195. 0	0. 49 S	2. 55 S
27	Tu.	25	19. 37	201. 16	207. 40	5. 0	7. 4
28	W.	26	20. 29	214. 15	221. 1	9. 5	11. 0
29	Th.	27	21. 25	227. 59	235. 10	12. 48	14. 27
30	F.	28	22. 25	242. 34	250. 11	15. 54	17. 6
31	Sa.	29	23. 27	257. 59	265. 55	18. 2	18. 39

DECEMBER 1774.

Days of the Month.	Days of the Week.	Semid^{r}. ☽ at Noon.	Semid^{r}. ☽ at Midnight.	Hor. Par. ☽ at Noon.	Hor. Par. ☽ at Midnight.	Proport. Logar. at Noon.	Proport. Logar. at Mid.
		M. S.	M. S.	M. S.	M. S.		
1	Th.	16. 15	16. 21	59. 37	60. 0	4799	4771
2	F.	16. 26	16. 32	60. 20	60. 39	4747	4724
3	Sa.	16. 35	16. 38	60. 52	61. 2	4709	4697
4	*Su.*	16. 39	16. 39	61. 6	61. 7	4692	4691
5	M.	16. 38	16. 36	61. 3	60. 55	4696	4705
6	Tu.	16. 33	16. 29	60. 43	60. 28	4719	4737
7	W.	16. 24	16. 18	60. 10	59. 50	4759	4783
8	Th.	16. 12	16. 6	59. 28	59. 6	4810	4837
9	F.	16. 0	15. 53	58. 43	58. 19	4865	4895
10	Sa.	15. 47	15. 41	57. 56	57. 33	4923	4952
11	*Su.*	15. 35	15. 29	57. 11	56. 51	4980	5005
12	M.	15. 24	15. 19	56. 31	56. 13	5031	5054
13	Tu.	15. 14	15. 10	55. 55	55. 38	5077	5099
14	W.	15. 6	15. 2	55. 25	55. 12	5116	5133
15	Th.	14. 59	14. 56	55. 0	54. 48	5149	5165
16	F.	14. 53	14. 51	54. 38	54. 30	5178	5189
17	Sa.	14. 49	14. 48	54. 23	54. 17	5198	5206
18	*Su.*	14. 46	14. 45	54. 12	54. 9	5213	5217
19	M.	14. 45	14. 44	54. 6	54. 5	5221	5222
20	Tu.	14. 44	14. 45	54. 6	54. 7	5221	5219
21	W.	14. 46	14. 48	54. 11	54. 18	5214	5205
22	Th.	14. 50	14. 52	54. 25	54. 35	5195	5182
23	F.	14. 55	14. 59	54. 46	55. 0	5167	5149
24	Sa.	15. 4	15. 8	55. 16	55. 34	5128	5104
25	*Su.*	15. 14	15. 20	55. 55	56. 17	5077	5049
26	M.	15. 27	15. 34	56. 41	57. 8	5018	4984
27	Tu.	15. 41	15. 49	57. 35	58. 3	4950	4915
28	W.	15. 57	16. 5	58. 32	59. 1	4878	4843
29	Th.	16. 13	16. 20	59. 29	59. 56	4809	4776
30	F.	16. 26	16. 32	60. 20	60. 42	4747	4721
31	Sa.	16. 37	16. 41	61. 0	61. 15	4699	4682

DECEMBER 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	Noon.	3 Hours.	6 Hours.	9 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
5	α Pegaſi.	69. 25. 11	67. 40. 35	65. 56. 22	64. 12. 33
6		55. 40. 39	54. 0. 1	52. 20. 11	50. 41. 9
7		42. 39. 54			
7	α Arietis.	83. 51. 19	82. 5. 43	80. 20. 30	78. 35. 39
8		69. 57. 21	68. 14. 54	66. 32. 53	64. 51. 19
9		56. 30. 32	54. 51. 53	53. 13. 47	51. 36. 15
10		43. 37. 23			
10	Aldebaran.	74. 25. 33	72. 45. 0	71. 4. 47	69. 24. 53
11		61. 10. 0	59. 31. 56	57. 54. 9	56. 16. 38
12		48. 13. 4	46. 37. 7	45. 1. 25	43. 25. 56
13		35. 31. 59	33. 57. 50	32. 23. 53	30. 50. 8
14		23. 4. 6			
14	Pollux.	67. 26. 21	65. 55. 26	64. 24. 43	62. 54. 12
15		55. 24. 40	53. 55. 24	52. 26. 20	50. 57. 31
16		43. 36. 47	42. 9. 23	40. 42. 17	39. 15. 30
17		32. 7. 1			
17	Regulus.	66. 44. 32	65. 14. 43	63. 45. 0	62. 15. 23
18		54. 48. 31	53. 19. 18	51. 50. 9	50. 21. 3
19		42. 56. 25	41. 27. 38	39. 58. 53	38. 30. 10
20		31. 6. 45	29. 38. 8	28. 9. 31	26. 40. 54
21		19. 17. 49			
21	Spica ♍	73. 1. 17	71. 32. 52	70. 4. 26	68. 35. 57
22		61. 12. 48	59. 43. 58	58. 15. 3	56. 46. 3
23		49. 19. 34	47. 49. 55	46. 20. 9	44. 50. 15
24		37. 18. 57	35. 48. 18	34. 17. 30	32. 46. 32
25		25. 10. 22	23. 38. 51	22. 7. 34	20. 36. 32
26		13. 8. 19			
23	The Sun.	120. 26. 41	119. 4. 16	117. 41. 41	116. 18. 57
24		109. 22. 26	107. 58. 28	106. 34. 14	105. 9. 47
25		98. 3. 35	96. 37. 29	95. 11. 5	93. 44. 22
26		86. 25. 53	84. 57. 8	83. 28. 1	81. 58. 31
27		74. 25. 11	72. 53. 18	71. 20. 59	69. 48. 15
28		61. 58. 8	60. 22. 47	58. 46. 59	57. 10. 45
29		49. 3. 7	47. 24. 18	45. 45. 4	44. 5. 27

DECEMBER 1774.

Diſtances of ☽'s Center from ☉, and from Stars eaſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S	D. M. S.
4	α Pegaſi.	76. 26. 13	74. 40. 38	72. 55. 15	71. 10. 5
5		62. 29. 7	60. 46. 8	59. 3. 44	57. 21. 54
6		49. 2. 54	47. 25. 37	45. 49. 18	44. 14. 3
7	α Arietis	76. 51. 11	75. 7. 7	73. 23. 27	71. 40. 12
8		63. 10. 12	61. 29. 32	59. 49. 22	58. 9. 42
9		49. 59. 16	48. 22. 52	46. 47. 6	45. 11. 55
10	Aldebaran.	67. 45. 18	66. 6. 1	64. 27. 3	62. 48. 22
11		54. 39. 24	53. 2. 26	51. 25. 43	49. 49. 16
12		41. 50. 42	40. 15. 42	38. 40. 54	37. 6. 20
13		29. 16. 34	27. 43. 11	26. 9. 59	24. 36. 57
14	Pollux.	61. 23. 53	59. 53. 46	58. 23. 51	56. 54. 9
15		49. 28. 54	48. 0. 30	46. 32. 20	45. 4. 26
16		37. 49. 3	36. 22. 57	34. 57. 14	33. 31. 55
17	Regulus.	60. 45. 52	59. 16. 26	57. 47. 3	56. 17. 45
18		48. 52. 1	47. 23. 3	45. 54. 8	44. 25. 15
19		37. 1. 28	35. 32. 46	34. 4. 5	32. 35. 24
20		25. 12. 18	23. 43. 42	22. 15. 5	20. 46. 27
21	Spica ♍	67. 7. 26	65. 38. 52	64. 10. 15	62. 41. 33
22		55. 16. 57	53. 47. 46	52. 18. 29	50. 49. 4
23		43. 20. 14	41. 50. 7	40. 19. 51	38. 49. 28
24		31. 15. 26	29. 44. 13	28. 12. 58	26. 41. 42
25		19. 5. 44	17. 35. 26	16. 5. 42	14. 36. 37
23	The Sun.	114. 56. 3	113. 32. 58	112. 9. 40	110. 46. 9
24		103. 45. 4	102. 20. 7	100. 54. 53	99. 29. 22
25		92. 17. 21	90. 50. 0	89. 22. 18	87. 54. 16
26		80. 28. 39	78. 58. 23	77. 27. 43	75. 56. 39
27		68. 15. 6	66. 41. 31	65. 7. 30	63. 33. 2
28		55. 34. 4	53. 56. 58	52. 19. 27	50. 41. 30
29		42. 25. 25	40. 45. 0	39. 4. 13	

DECEMBER 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

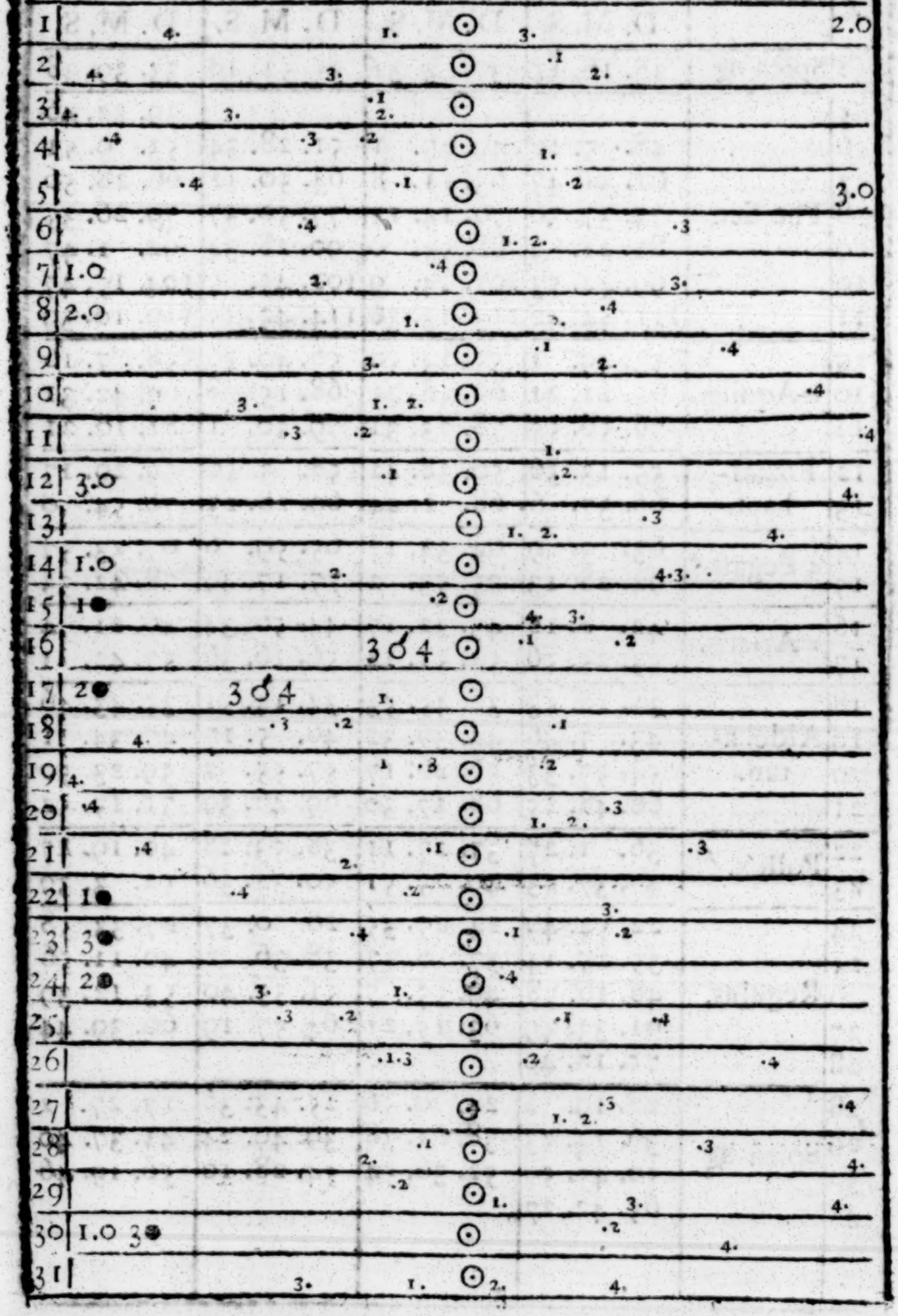
Days.	Stars Names.	Noon. D. M. S.	3 Hours. D. M. S.	6 Hours. D. M. S.	9 Hours. D. M. S.
1	Spica ♍	21. 13. 59	22. 58. 28	24. 43. 41	26. 29. 37
2		35. 28. 30			
6	The Sun.	41. 15. 39	42. 58. 21	44. 40. 51	46. 23. 8
7		54. 50. 51	56. 31. 31	58. 11. 54	59. 51. 59
8		68. 7. 23	69. 45. 27	71. 23. 11	73. 0. 34
9		81. 2. 12	82. 37. 27	84. 12. 21	85. 46. 54
10		93. 34. 40	95. 7. 12	96. 39. 25	98. 11. 19
11		105. 46. 9	107. 16. 13	108. 45. 59	110. 15. 28
12		117. 38. 47	119. 6. 40	120. 34. 17	
10	α Aquilæ.	59. 33. 48	61. 0. 32	62. 27. 22	63. 54. 18
11		71. 9. 34	72. 36. 32	74. 3. 24	75. 30. 12
12		82. 42. 32			
12	Fomalhaut.	49. 35. 9	50. 59. 26	52. 23. 57	53. 48. 40
13		60. 54. 45	62. 20. 16	63. 45. 50	65. 11. 27
14		72. 19. 35			
14	α Pegaſi.	57. 31. 0	58. 55. 30	60. 20. 5	61. 44. 45
15		68. 48. 49	70. 13. 41	71. 38. 32	73. 3. 23
16		80. 7. 16			
16	α Arietis.	36. 34. 45	37. 57. 38	39. 20. 52	40. 44. 23
17		47. 45. 47	49. 10. 38	50. 35. 37	52. 0. 43
18		59. 7. 28			
18	Aldebaran.	25. 20. 18	26. 49. 32	28. 18. 42	29. 47. 49
19		37. 12. 38	38. 41. 27	40. 10. 15	41. 39. 1
20		49. 2. 45	50. 31. 27	52. 0. 9	53. 28. 51
21		60. 52. 39	62. 21. 31	63. 50. 26	65. 19. 24
22		72. 45. 10			
22	Pollux.	30. 22. 56	31. 46. 53	33. 11. 17	34. 36. 8
23		41. 46. 39	43. 13. 51	44. 41. 22	46. 9. 13
24		53. 32. 59			
24	Regulus.	16. 46. 23	18. 18. 7	19. 50. 5	21. 22. 20
25		29. 7. 35	30. 41. 31	32. 15. 46	33. 50. 21
26		41. 48. 12	43. 24. 50	45. 1. 50	46. 39. 13
27		54. 52. 1	56. 31. 49	58. 12. 3	59. 52. 43
28		68. 22. 36	70. 5. 55	71. 49. 42	73. 33. 57
29	Spica ♍	29. 11. 12	30. 56. 4	32. 41. 33	34. 27. 39
30		43. 26. 27	45. 15. 41	47. 5. 22	48. 55. 27
31		58. 11. 44	60. 4. 0	61. 56. 33	63. 49. 22

DECEMBER 1774.

Diſtances of ☽'s Center from ☉, and from Stars weſt of her.

Days.	Stars Names.	12 Hours.	15 Hours.	18 Hours.	21 Hours.
		D. M. S.	D. M. S.	D. M. S.	D. M. S.
1	Spica ♍	28. 16. 15	30. 3. 31	31. 51. 18	33. 39. 38
5	The Sun.				39. 32. 46
6		48. 5. 12	49. 47. 1	51. 28. 34	53. 9. 51
7		61. 31. 47	63. 11. 8	64. 50. 12	66. 28. 56
8		74. 37. 36	76. 14. 17	77. 50. 37	79. 26. 35
9		87. 21. 7	88. 55. 0	90. 28. 34	92. 1. 47
10		99. 42. 53	101. 14. 9	102. 45. 7	104. 15. 47
11		111. 44. 40	113. 13. 36	114. 42. 15	116. 10. 39
9	α Aquilæ.	53. 49. 1	55. 14. 50	56. 40. 56	58. 7. 16
10		65. 21. 21	66. 48. 25	68. 15. 28	69. 42. 31
11		76. 56. 55	78. 23. 31	79. 50. 1	81. 16. 21
12	Fomalhaut.	55. 13. 36	56. 38. 42	58. 3. 56	59. 29. 17
13		66. 37. 6	68. 2. 44	69. 28. 23	70. 54. 0
14	α Pegaſi.	63. 9. 29	64. 34. 17	65. 59. 6	67. 23. 57
15		74. 28. 13	75. 53. 2	77. 17. 49	78. 42. 33
16	α Arietis.	42. 8. 12	43. 32. 17	44. 56. 34	46. 21. 4
17		53. 25. 56	54. 51. 14	56. 16. 36	57. 42. 1
18	Aldebaran.	31. 16. 53	32. 45. 53	34. 14. 51	35. 43. 46
19		43. 7. 46	44. 36. 32	46. 5. 17	47. 34. 1
20		54. 57. 33	56. 26. 17	57. 55. 2	59. 23. 50
21		66. 48. 25	68. 17. 30	69. 46. 39	71. 15. 52
22	Pollux.	36. 1. 27	37. 27. 11	38. 53. 18	40. 19. 47
23		47. 37. 23	49. 5. 51	50. 34. 36	52. 3. 39
24	Regulus.	22. 54. 49	24. 27. 35	26. 0. 37	27. 33. 58
25		35. 25. 14	37. 0. 27	38. 36. 2	40. 11. 56
26		48. 16. 58	49. 55. 7	51. 33. 40	53. 12. 39
27		61. 33. 49	63. 15. 21	64. 57. 19	66. 39. 44
28		75. 18. 40			
28	Spica ♍	22. 19. 2	24. 0. 56	25. 43. 36	27. 27. 2
29		36. 14. 23	38. 1. 38	39. 49. 24	41. 37. 40
30		50. 45. 59	52. 36. 54	54. 28. 10	56. 19. 46
31		65. 42. 27			

Configurations of the SATELLITES of JUPITER at 7 o'th' Clock in the Evening.



One thouſand Two hundred and Twenty LONGITUDES and LATITUDES of the MOON.

DEDUCED FROM

DR. BRADLEY'S OBSERVATIONS.

MADE BETWEEN

SEPTEMBER 13th, 1750, and NOVEMBER 2d, 1760,

AND

Compared with a Set of Manuſcript Tables.

	Days, N.S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1750		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Sept.	13	9. 58. 5	10. 21. 29. 43	4. 4. 22 N	— 43	— 21
	17	13. 35. 35	0. 23. 55. 12	4. 27. 14 N	+ 10	— 17
	19	15. 32. 10	1. 24. 41. 51	2. 38. 25 N	+ 1	+ 4
	23	19. 19. 2	3. 21. 6: 38	2. 7. 0 S	— 18	+ 2
	24	20. 8. 15	4. 4. 14. 20	3. 5. 55 S	— 11	— 1
Oct.	10	7. 44. 21	10. 14. 19. 1	3. 52. 45 N	— 10	— 25
	12	9. 27. 17	11. 14. 4. 5	4. 58. 49 N	— 55	— 23
	13	10. 20. 11	11. 29. 38. 31	5. 2. 7 N	— 60	— 21
	14	11. 15. 9	0. 15. 30. 14	4. 42. 30 N	— 43	— 11
	15	12. 15. 8	1. 1. 28. 53	4: 0. 31 N	— 9	+ 8
	17	14. 16. 58	2. 2. 49. 27	1. 48: 6 N	+ 14	+ 19
Nov.	4	3. 56. 22:	9. 12. 13. 47	1. 45. 41 N	— 4	— 24
	5	4. 47. 2	9. 25. 22. 37	2. 49. 42 N	+ 3	— 33
	6	5. 36. 56	10. 8. 52. 40	3. 46. 3 N	+ 3	— 36
	7	6. 26. 16	10. 22. 47. 22	4. 31. 5 N	— 4	— 32
	9	8. 5. 51	11. 21. 58. 49	5. 11. 40 N	— 24	— 22
	12	10. 51. 19	1. 8. 38. 28	3. 35. 20 N	— 38	+ 5
	14	12. 58. 14	2. 10. 3. 15	1. 5. 10 N	— 5	+ 11
	19	17. 32. 34	4. 21. 2. 42	4. 30. 5 S	+ 11	— 17
Dec.	2	2. 44. 20	9. 21. 21. 40	2. 36. 40 N	— 33	— 36
	6	5. 59. 25	11. 16. 27. 55	5. 16. 6 N	— 15	— 35
	8	7. 40. 12	0. 15. 54. 3	4. 49. 59 N	+ 5	— 16
	9	8. 34. 48	1. 1. 3. 31	4. 6. 12 N	— 22	— 7
	10	9. 32. 56	1. 16. 24. 25	3. 4. 28 N	— 16	— 2
	11	10. 34. 6	2. 1. 49. 22	1. 49. 1 N	— 1	+ 6
	12	11. 37. 54	2. 17. 9. 51	0. 26. 47 N	— 6	— 21
	18	16. 53. 27	5. 11. 17. 41	5. 11. 58 S	+ 25	— 8
	21	18. 59. 11	6. 18. 31. 8	4. 43. 37 S	+ 23	— 11
	22	19. 42. 31	7. 0. 42. 30	4. 6. 57 S	+ 28	+ 6
1751 Jan.	7	8. 20. 20::	1. 25. 20. 30	2. 20. 5 S	+ 26	— 10
	8	9. 20. 24	2. 10. 13. 58	1. 2. 47 N	+ 11	— 3
	9	10. 21. 3	2. 25. 3. 39	0. 18. 15 S	+ 3	+ 5
	11	12. 17. 40	3. 24. 9. 30	2. 47. 51 S	+ 5	+ 35
	17	16. 53. 54	6. 13. 25. 20	4. 48. 24 S	+ 12	+ 6
	18	17. 36. 52	6. 25. 41. 23	4. 16. 48 S	+ 23	— 5

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1751		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Feb.	6	9. 9. 57	3. 4. 4. 17	1. 13. 29 S	+ 17	— 11
	7	10. 5. 58	3. 18. 14. 13	2. 23. 7 S	+ 9	+ 15
	9	11. 48. 39	4. 15. 55. 30	4. 11. 42 S	— 19	+ 4
	10	12. 37. 38	4. 29. 24. 18	4. 44. 5 S	— 22	+ 16
	15	16. 15. 7	7. 2. 49. 22	3. 39. 39 S	+ 22	+ 14
	19	19. 27. 27	8. 22. 7. 48	0. 16. 55: N	+ 1	— 1
	20	20. 19. 7	9. 4. 59. 38	1. 24. 16: N	+ 3	— 11
Mar.	5	7. 5. 9	2. 29. 44. 44	1. 3. 27 S	— 10	+ 2
	8	9. 43. 45	4. 11. 5. 45	4. 2. 23 S	— 25	+ 7
	15	14. 55. 14	7. 10. 16. 15	2. 56. 36 S	+ 7	+ 5
	19	18. 9. 10	8. 29. 28. 7	1. 11. 19 N	— 28	+ 1
	20	18. 59. 50	9. 12. 15. 48	2. 15. 19 N	— 27	— 29
	31	3. 58. 46	2. 10. 19. 7	0. 23. 51 N	+ 4	— 6
Apr.	2	5. 56. 34	3. 9. 27. 17	2. 6. 55 S	— 5	+ 51
	3	6. 50. 51	3. 23. 25. 29	3. 11. 6 S	— 29	+ 3
	6	9. 13. 49	5. 3. 21. 55	4. 59. 10 S	— 23	— 8
	9	11. 22. 6	6. 11. 18. 25	4. 31. 32 S	— 24	+ 12
	10	12. 6. 21	6. 23. 40. 40	3. 55. 8 S	— 17	— 7
	11	12. 51. 48	7. 5. 57. 5	3. 7. 58 S	— 7	— 1
	20	20. 9. 5	11. 0. 46. 4	5. 2. 20 N	+ 55	— 12
May	2	6. 26. 16	4. 16. 4. 26	4. 39. 10 S	— 4	— 7
	3	7. 12. 21	4. 29. 18. 47	5. 4. 26 S	— 8	— 15
	4	7. 56. 11	5. 12. 13. 32	5. 13. 5 S	— 5	— 9
	5	8. 38. 45	5. 24. 52. 56	5. 6. 35 S	— 6	— 2
	14	15. 39. 0	9. 15. 51. 39	2. 53. 21 N	— 43	— 2
	16	17. 14. 42	10. 11. 46. 1	4. 31. 40 N	— 38	— 5
	17	18. 2. 3	10. 25. 13. 40	5. 2. 0 N	— 43	— 4
	19	19. 38. 29	11. 23. 27. 17	5. 11. 1 N	— 68	+ 4
	20	20. 29. 27	0. 8. 16. 6	4. 45. 38 N	— 80	+ 13
	30	5. 7. 35	4. 24. 22. 37	5. 1. 51 S	+ 39	— 9
	31	5. 53. 11	5. 7. 41. 22	5. 16. 36 S	+ 21	— 6
June	1	6. 36. 46	5. 20. 36. 38	5. 14. 43 S	+ 23	+ 6
	4	8. 45. 22	6. 27. 52. 58	3. 44. 8 S	+ 17	+ 6
	6	10. 16. 30	7. 22. 15. 33	1. 51. 1 S	+ 8	+ 10
	12	15. 12. 36	10. 7. 40. 38	4. 19. 56 N	— 40	— 6

	Days, N.S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1751		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
June	13	15. 59. 40	10. 20. 55. 46	4. 54. 30 N	— 46	+ 12
	14	16. 46. 22	11. 4. 28. 1	5. 13. 26 N	— 43	+ 12
	15	17. 33. 28	11. 18. 19. 46	5. 15. 8 N	— 37	+ 9
	17	19. 12. 50	0. 17. 7. 46	4. 21. 6 N	— 47	+ 16
	18	20. 7. 3	1. 2. 4. 5	3. 25. 39 N	— 42	— 14
	28	4. 31. 37	5. 15. 25. 20	5. 14. 48 S	+ 41	— 12
July	4	8. 59. 40	8. 0. 6. 33	1. 7. 22 S	+ 17	+ 2
	5	9. 48. 36	8. 12. 24. 35	0. 0. 21 S	+ 29	+ 15
	6	10. 38. 34	8. 24. 51. 20	1. 7. 20 N	+ 20	— 22
	8	12. 20. 54	9. 20. 22. 1	3. 12. 8 N	+ 4	— 11
	17	19. 53. 33	1. 26. 28. 50	1. 23. 4 N	— 29	+ 8
	19	21. 55. 39	2. 16. 41. 15	1. 19. 39 S	— 42	in A.R.
	27	3. 52. 58	6. 5. 46. 57	4. 39. 43 S	+ 48	0
Aug.	3	9. 21. 20	9. 2. 29. 41	1. 52. 0 N	+ 7	— 24
	5	11. 1. 22	9. 28. 23. 55	3. 44. 53 N	+ 11	— 3
	8	13. 28. 59	11. 9. 29. 23	5. 2. 59 N	— 8	+ 8
	11	15. 57. 52	0. 22. 32. 43	3. 43. 51 N	— 25	+ 8
	13	17. 47. 48	1. 21. 48. 12	1. 34. 56:: N	— 25	— 6
	14	18. 46. 20	2. 6. 30. 50	0. 18. 5 N	— 36	— 5
	26	4. 0. 27	1. 8. 7. 51	2. 32. 33 S	+ 63	+ 52
	30	7. 12. 24	8. 27. 11. 10	1. 37. 23 N	+ 4	+ 4
Sept.	2	9. 41. 7	10. 5. 54. 38	4. 15. 7 N	— 9	— 20
	3	10. 30. 3	10. 19. 33. 5	4. 45. 36 N	— 7	— 15
	5	12. 9. 10	11. 17. 57. 48	4. 55. 50 N	+ 7	— 7
	6	13. 0. 30	0. 2. 37. 23	4. 32. 20 N	+ 2	+ 4
	7	13. 52. 26	0. 17. 27. 9	3. 50. 26 N	+ 1	+ 4
	8	14. 46. 35	1. 2. 21. 59	2. 52. 30 N	— 14	+ 5
	13	19. 36. 34	3. 15. 48. 51	3. 9. 44 S	— 27	+ 14
	14	20. 30. 40	4. 0. 1. 40	4. 2. 36:: S	— 14	— 60
	29	7. 30. 36	9. 29. 49. 42	4. 8. 44 N	— 7	— 5
Oct.	1	9. 7. 10	10. 26. 47. 19	5. 2. 39 N	— 32	— 13
	2	9. 56. 2	11. 10 57. 59	5. 4. 28 N	— 39	— 8
	3	10. 46. 6	11. 25. 35. 41	4. 46. 59 N	— 41	— 14
	7	14. 32. 22	1. 26. 38. 36	0. 43. 20 N	— 30	+ 5
	10	17. 32. 10	3. 11. 28. 22	3. 5. 29 S	— 27	— 3

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1751		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Oct.	11	18. 27. 21	3. 25. 48. 29	4. 0. 55 S	— 34	+ 4
	13	20. 7. 46	4. 23. 31. 41	5. 3. 17 S	+ 14	+ 14
	14	20. 54. 7	5. 6. 58. 20	5. 8. 44 S	+ 14	+ 18
	24	3. 47. 2	8. 9. 29. 54	2. 16. 58 N	+ 4	— 16
	25	4. 35. 53	9. 12. 0. 36	3. 14. 11 N	+ 3	— 21
	26	5. 22. 47	9. 24. 29. 46	4. 3. 3 N	+ 2	— 19
	28	6. 57. 50	10. 20. 24. 33	5. 5. 35 N	— 5	— 8
	29	7. 45. 8	11. 4. 0. 11	5. 14. 28 N	— 29	— 27
	30	8. 32. 7	11. 18. 5. 55	5. 4. 53 N	— 36	— 22
	31	9. 22. 20	0. 2. 42. 42	4. 35. 38 N	— 46	— 13
Nov.	1	10. 15. 23	0. 17. 48. 15	3. 46. 36 N	— 49	— 7
	2	11. 11. 55	1. 3. 16. 49	2. 39. 29 N	— 26	+ 27
	3	12. 14. 24	1. 19. 1. 34	1. 19. 49 N	— 23	+ 14
	7	16. 20. 29	3. 20. 44. 54	3. 51. 52 S	— 18	— 7
	8	17. 14. 49	4. 5. 14. 20	4. 38. 29 S	— 12	— 13
	9	18. 5. 18	4. 19. 16. 50	5. 6. 47 S	— 8	— 14
	10	18. 52. 39	5. 2. 54. 6	5. 16. 41 S	+ 17	— 13
	12	20. 21. 52	5. 29. 7. 34	4. 47. 5 S	+ 6	— 64
	13	21. 5. 34	6.11.49.56::	4. 9. 58 :S	+ 26	— 41
	14	21. 49. 43	6.24.21.28::	3. 21. 55 :S	+ 4	— 57
	27	7. 10. 4	11. 25. 42. 11	4. 55. 7 N	— 2	— 22
	28	7. 59. 49	0. 10. 4. 55	4. 16. 15 N	— 12	— 14
	30	9. 50. 8	1. 10. 19. 10	2. 6. 3 N	— 9	— 28
Dec	2	11. 56. 31	2. 11. 58. 25	0. 46. 0 S	— 12	+ 8
	4	14. 4. 37	3. 13. 33. 39	3. 24. 23 S	+ 13	— 18
	6	15. 57. 26	4. 13. 37. 16	4. 58. 38 S	+ 14	— 27
	9	18. 19. 58	9. 24. 52. 47	4. 56. 1 S	+ 20	— 27
	24	5. 5. 5	11. 20. 34. 41	4. 59. 35 N	+ 3	— 8
	25	5. 52. 6	0. 4. 18. 11	4. 29. 0 N	+ 18	— 18
	31	11. 40. 45	3. 4. 52. 34::	2. 44. 4 S	+ 2	— 10
1752						
Jan.	1	12. 43. 37	3. 20. 35. 15	3. 49. 35 S	+ 13	— 10
	8	18. 29. 31	6. 28. 23. 33	2. 55. 7 S	+ 10	0
	20	3. 4. 9	11. 16. 29. 45	4. 55. 3 N	+ 23	+ 2
	23	5. 28. 33	0. 27. 52. 48	2. 29. 21 N	+ 29	+ 4
	26	8. 18. 52	2. 11. 53. 57	0. 55. 26 S	+ 32	+ 2
	27	9. 20. 21	2. 27. 7. 34	2. 12. 13 S	+ 14	+ 9

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1752		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Jan.	28	10. 21. 35	3. 12. 29. 45	3. 20. 10 S	— 3	+ 2
	29	11. 20. 55	3. 27. 51. 45	4. 13. 24 S	+ 7	0
Feb.	1	14. 2. 17	5. 12. 28. 30	4. 55. 50 S	— 4	+ 9
	9	20. 19. 48	8. 24. 51. 17	2. 6. 22 N	+ 10	+ 25
	22	6. 11. 33	2. 6. 54. 59	0. 44. 41 S	+ 7	— 16
	23	7. 10. 43	2. 21. 38. 10	1. 59. 6 S	+ 5	+ 3
	25	9. 8. 5	3. 21. 20. 38	4. 1. 8 S	+ 9	+ 4
	26	10. 3. 57	4. 6. 12. 22	4. 39. 24 S	— 11	+ 4
	27	10. 57. 13	4. 20. 56. 53	4. 58. 42 S	— 17	+ 5
	28	11. 48. 3	5. 5. 28. 23	4. 58. 12 S	— 20	+ 12
Mar.	1	13. 26. 49	6. 3. 34. 24	4. 3. 44 S	+ 1	+ 16
	2	14. 13. 51	6. 17. 2. 24	3. 15. 38 S	+ 13	+ 10
	4	15. 48. 5	7. 12. 52. 41	1. 14. 52 S	+ 6	+ 11
	6	17. 23. 56	8. 7. 39. 24	0. 56. 0 N	— 9	— 5
	7	18. 12. 18	8. 19. 51. 58	1. 58. 20 N	— 23	— 9
	9	19. 48. 32	9. 14. 24. 50	3. 44. 20 N	+ 1	+ 9
	11	21. 22. 51	10. 9. 43. 59	4. 51. 15 N	— 10	— 35
	19	3. 9. 3	1. 17. 45. 44	0. 43. 18 N	+ 5	+ 9
	23	7. 2. 22	3. 16. 37. 17	3. 58. 26 S	+ 4	+ 7
	24	7. 57. 38	4. 1. 10. 20	4. 39. 35 S	+ 10	+ 3
	25	8. 50. 20	4. 15. 35. 33	5. 2. 40 S	+ 3	— 6
	27	10. 29. 12	5. 13. 52. 59	4. 51. 44 S	+ 4	+ 6
	28	11. 16. 35	5. 27. 40. 47	4. 20. 15 S	— 5	+ 1
	29	12. 4. 32	6. 11. 12. 33	3. 34. 19 S	— 25	+ 10
	30	12. 52. 32	6. 24. 26. 59	2. 37. 46 S	— 8	+ 11
	31	13. 39. 53	7. 7. 23. 31	1. 34. 17 S	+ 3	— 8
Apr.	2	15. 16. 8	8. 2. 32. 0	0. 40. 52 N	+ 5	— 1
	5	17. 40. 53	9. 9. 17. 26	3. 57. 59 N	— 36	0
	8	20. 0. 25	10. 16. 54. 35	5. 8. 55 N	— 41	+ 12
	9	20. 46. 26	11. 0. 2. 47	5. 10. 39 N	— 27	+ 14
	10	21. 33. 5	11. 13. 35. 1	4. 5. 33 N	— 24	+ 15
	18	3. 58. 5	2. 27. 8. 34	2. 49. 42 S	+ 24	+ 9
	20	5. 53. 53	3. 26. 49. 37	4. 38. 55 S	+ 9	— 5
	21	6. 47. 18	4. 11. 16. 58	5. 6. 40 S	+ 23	— 3
	22	7. 37. 49	4. 25. 27. 40	5. 14. 54 S	— 4	+ 9
	26	10. 45. 10	6. 19. 31. 14	3. 0. 55 S	+ 14	+ 6

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1752		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Apr.	28	12. 21. 26	7. 15. 9. 53	0. 50. 54 S	+ 10	+ 7
	30	13. 58. 11	8. 10. 4. 19	1. 25. 58 N	+ 10	— 10
May	5	17. 53. 29	10. 11. 34. 32	5. 9. 30 N	— 31	+ 6
	6	18. 38. 28	10. 24. 18. 21	5. 17. 31 N	— 31	+ 17
	7	19. 23. 41	11. 7. 22. 25	5. 9. 34 N	— 11	0
	15	1. 43. 49	2. 20. 33. 48::	2. 20. 25:: S	+ 51	+ 2
	17	3. 45. 49	3. 21. 26. 49	4. 26. 59 S	+ 4	— 23
	18	4. 42. 2	4. 6. 25. 46	5. 3. 9 S	+ 30	— 63
	19	5. 34. 36	4. 20. 59. 39	5. 17. 16 S	+ 44	— 17
	22	7. 57. 29	6. 2. 18. 13	4. 11. 4 S	+ 39	— 7
	23	8. 43. 8	6. 15. 23. 52	3. 20. 35 S	+ 42	+ 9
	24	9. 29. 4	6. 28. 14. 42	2. 21. 1 S	+ 33	— 27
	25	10. 15. 42	7. 10. 53. 15	1. 14. 45 S	+ 29	+ 3
	27	11. 52. 32	8. 5. 44. 52	1. 2. 10 N	+ 26	— 13
	29	13. 30. 26	9. 0. 16. 12	3. 5. 28 N	+ 11	— 11
June	1	15. 49. 43	10. 7. 4. 8	5. 1. 36 N	+ 3	— 7
	3	17. 18. 21	11. 2. 14. 45	5. 12. 33 N	— 30	+ 2
	14	2. 29. 44	3. 29. 50. 25::	4. 45. 10 S	+ 86	+ 13
	15	3. 25. 54	4. 15. 6. 34	5. 9. 24 S	+ 78	— 19
	16	4. 18. 21	4. 29. 53. 58	5. 11. 25 S	+ 64	— 10
	18	5. 55. 12	5. 27. 57. 27	4. 19. 50 S	+ 44	— 3
	19	6. 41. 28	6. 11. 17. 53	3. 32. 37 S	+ 45	— 2
	22	9. 0. 44	7. 19. 25. 58	0. 25. 10 S	+ 36	+ 16
	23	9. 48. 28	8. 1. 46. 5	0. 41. 58 N	+ 28	— 19
	25	11. 25. 2	8. 26. 14. 39	2. 45. 53 N	+ 20	— 18
	29	14. 32. 33	10. 15. 29. 7	5. 5. 14 N	+ 11	— 13
July	2	16. 44. 54	11. 23. 47. 51	4. 25. 41 N	— 2	— 23
	5	19. 10. 53	1. 4. 55. 38:	1. 36. 20:: N	— 12	+ 35
	20	7. 45. 24	7. 27. 43. 40	0. 28. 31 N	+ 33	— 9
	22	9. 21. 42	8. 22. 13. 2	2. 32. 7 N	+ 21	— 24
	23	10. 9. 43	9. 4. 25. 50	3. 24. 17 N	+ 8	— 32
	26	12. 31. 3	10. 11. 30. 32	4. 56. 48 N	+ 25	— 24
	27	13. 15. 37	10. 24. 6. 1	5. 0. 53 N	+ 29	— 14
	28	13. 59. 46	11. 6. 51. 4	4. 50. 11 N	+ 8	— 9
	29	14. 44. 4	11. 19. 46. 39	4. 24. 41 N	+ 4	— 11

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1752		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Aug.	4	19. 52. 46	2. 13. 17. 42	1. 56. 20 S	— 31	— 19
	16	5. 40. 15	7. 23. 7. 46	0. 19. 7 N	+ 30	— 8
	19	8. 5. 6	9. 0. 4. 21	3. 17. 6 N	+ 14	— 18
	23	11. 10. 39	10. 19. 42. 17	5. 0. 51 N	+ 22	— 24
	25	12. 42. 21	11. 15. 33. 22	4. 28. 1 N	+ 24	— 8
	28	15. 3. 20	0. 25. 51. 34	1. 54. 20 N	— 2	0
	30	16. 48. 38	1. 23. 51. 52	0. 31. 44 S	— 12	— 16
	31	17. 45. 17	2. 8. 15. 27	1. 46. 0 S	— 19	— 7
Sept.	1	18. 43. 47	2. 22. 54. 47	2. 54. 50 S	— 25	— 9
	2	19. 42. 56	3. 7. 48. 31	3. 52. 43 S	— 30	+ 6
	12	3. 32. 3	7. 17. 43. 41	0. 4. 12 N	+ 42	— 7
	16	6. 46. 25	9. 7. 31. 15	3. 58. 13 N	+ 6	— 13
	17	7. 33. 23	9. 19. 46. 41	4. 38. 8 N	— 5	— 17
	19	9. 4. 54	10. 14. 40. 10	5. 7. 2 N	— 12	— 6
	22	11. 20. 47	11. 23. 44. 22	4. 4. 27 N	+ 1	+ 5
	24	12. 59. 3	0. 21. 9. 30	2. 9. 52 N	0	+ 19
	25	13. 50. 30	1. 5. 13. 31	0. 57. 50 N	— 17	+ 6
	27	15. 40. 56	2. 3. 55. 45	1. 36. 7 S	— 33	— 31
	29	17. 37. 16½	3. 3. 11. 4	3. 48. 35 S	— 35	+ 7
	30	18. 34. 49	3. 17. 55. 35	4. 34. 45 S	— 18	+ 9
Oct.	12	3. 50. 33	8. 20. 7. 54	2. 58. 57 N	+ 32	+ 6
	13	4. 38. 56	9. 2. 27. 47	3. 50. 23 N	+ 34	— 9
	16	6. 57. 41	10. 9. 19. 0	5. 13. 20 N	— 10	— 9
	17	7. 42. 20	10. 21. 50. 49	5. 13. 14 N	— 19	— 2
	18	8. 26. 55	11. 4. 38. 5	4. 57. 55 N	— 19	— 6
	20	9. 58. 39	0. 1. 13. 1	3. 40. 18 N	— 21	— 3
	21	10. 47. 15	0. 15. 4. 5	2. 39. 53 N	— 30	— 13
	23	12. 35. 13	1. 13. 49. 30	0. 8. 25 N	— 17	— 3
	24	13. 32. 26	1. 28. 35. 59	1. 12. 50 S	— 18	— 2
	25	14. 31. 37	2. 13. 31. 42	2. 29. 46 S	— 27	+ 8
	27	16. 30. 9	3. 13. 27. 37	4. 29. 10 S	— 22	+ 5
	28	17. 26. 51	3. 28. 17. 46	5. 3. 9 S	— 11	— 6
	29	18. 20. 58	4. 12. 58. 4	5. 16. 45 S	+ 6	— 5
	30	19. 12. 38	4. 27. 26. 20	5. 9. 56 S	+ 39	— 1
	31	20. 2. 24	5. 11. 42. 2	4. 44. 11 S	+ 37	— 1

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1752		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Nov.	11	4. 6. 4	9. 21.59.16	4.49.28: N	+ 44:	′ ″ +1.51:::
	13	5. 35. 37	10. 16.31. 2	5.17.19 N	+ 15	— 8
	14	6. 19. 22	10. 28.58.48	5. 8.17 N	+ 4	— 8
	15	7. 3. 17	11. 11.41.39	4.44.27 N	0	— 15
	16	7. 48. 11	11. 24.44.45	4. 5.22 N	— 1	— 15
	19	10. 17. 21	1. 6.32.13	0.48.49 N	— 23	— 12
	20	11. 13. 57	1. 21.23.10	0.33.52 S	— 20	— 10
	21	12. 16. 11	2. 6.37.33	1.54.55 S	— 15	+ 7
	25	16. 15. 59	4. 8. 8.52	5.13. 3 S	— 12	— 6
	26	17. 9. 32	4. 22.58.49	5.12.32 S	+ 2	— 12
	29	19. 36. 54	6. 5.17.34	3.22.38 S	+ 42	— 21
	30	20. 24. 18	6. 18.44.23	2.20.48 S	+ 48	— 20
Dec.	12	4. 57. 54	11. 6.31.20	4.49. 2 N	+ 19	— 11
	13	5. 41. 13	11. 19. 8. 4	4.16.54 N	+ 14	— 15
	14	6. 25. 42	0. 2. 2.51	3.31. 1 N	+ 28	— 16
	16	8. 1. 57	0. 29. 8.58	1.23.25 N	+ 25	— 15
	19	10. 53. 54	2. 13.43.58	2.30.35 S	— 5	+ 25
	20	11. 58. 4	2. 29.29. 2	3.38. 8 S	+ 5	+ 8
	21	13. 2. 2	3. 15.24.21	4.29.24 S	+ 12	+ 6
	22	14. 2. 38	4. 1.15.38	4.59.54 S	+ 6	— 10
	23	15. 0. 0	4. 16.50.55	5. 7.13 S	+ 10	— 8
	26	17. 34. 29	6. 0.54.28	3.20.28 S	— 13	— 18
	27	18. 22. 34	6. 14.37.33	2.31. 9 S	— 2	— 22
1753 Jan.	17	10. 36. 27	3. 6.30.53	4. 5. 9 S	+ 13	+ 7
	23	16. 16. 25	6. 9.16.19	2.40. 7 S	— 17	+ 12
	26	18. 43. 31	7. 19.32.42	0.43.57 N	— 32	+ 9
Feb.	9	4. 38. 17	1. 2. 8.55	0.37.40 N	— 21	+ 16
	15	10. 18. 32	3. 29.52.36	4.58.11 S	— 5	— 2
	16	11. 17. 8	4. 15.40.53	4.59.31 S	— 25	+ 11
	21	15. 45. 51	7. 0.44.33	0.39.18 S	— 6	+ 7
	25	19. 5. 0	8. 22.41.31	3.34.44 N	— 27	— 19
Mar.	8	2. 36. 34	0. 28. 7.46	0.46.57 N	— 19	+ 20
	9	3. 26. 6½	1. 11.33.22	0.25. 2 S	— 37	— 8
	10	4. 18. 14	1. 25.14.48	1.37.34 S	— 12	— 28

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Lat.	Error of Tab. in Long.
1753		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Mar.	12	6. 9. 32	2. 23. 34. 8	3. 45. 29 S	— 2	— 12
	13	7. 6. 23	3. 8. 13. 31	4. 31. 46 S	— 22	— 2
	15	9. 2. 14	4. 8. 22. 55	5. 9. 21 S	+ 2	— 5
	18	11. 45. 35	5. 24. 14. 14	3. 28. 43 S	+ 7	— 10
	19	12. 40. 16	6. 9. 10. 13	2. 22. 24 S	+ 24	+ 5
	21	14. 24. 6	7. 7. 48. 17	0. 8. 5 N	— 6	— 17
	24	16. 57. 12	8. 17. 33. 57	3. 26. 8 N	+ 20	+ 13
	26	18. 34. 22	9. 12. 32. 34	4. 45. 37 N	— 46	+ 38
Apr.	11	6. 55. 18	4. 3. 10. 33	5. 15. 47 S	— 19	— 6
	15	10. 26. 14	6. 2. 23. 59	2. 55. 29 S	+ 19	— 7
	17	12. 10. 14	7. 1. 6. 34	0. 26. 48 S	+ 23	— 27
	19	13. 55. 9	7. 28. 34. 53	2. 2. 1 N	+ 25	+ 11
	21	15. 37. 19	8. 24. 42. 10	3. 58. 38 N	+ 22	— 5
	22	16. 26. 30	9. 7. 19. 48	4. 38. 28 N	+ 23	— 2
	23	17. 14. 1	9. 19. 45. 31	5. 4. 31 N	+ 3	+ 2
	26	19. 27. 54	10. 26. 36. 47	4. 56. 56 N	— 38	— 11
May	6	2. 56. 15	2. 29. 0. 6	4. 13. 12 S	+ 11	— 17
	7	3. 54. 29	3. 13. 51. 53	4. 53. 20 S	+ 2	— 12
	9	5. 46. 16	4. 13. 34. 32	5. 13. 30 S	— 4	0
	10	6. 39. 8	4. 28. 17. 6	4. 52. 40 S	— 11	0
	11	7. 30. 24	5. 12. 51. 22	4. 13. 2 S	+ 42	+ 4
	12	8. 20. 40	5. 27. 15. 30	3. 18. 16 S	+ 53	— 17
	14	10. 0. 52	6. 25. 29. 2	0. 57. 46 S	+ 43	— 3
	15	10. 51. 39	7. 9. 16. 41	0. 17. 52 N	+ 17	+ 10
	16	11. 43. 0	7. 22. 50. 8	1. 31. 28 N	— 13	— 1
	22	16. 38. 42	10. 9. 19. 41	5. 12. 54 N	+ 2	— 3
	23	17. 22. 29	10. 21. 34. 20	5. 1. 33 N	— 17	+ 2
	24	18. 5. 27	11. 3. 51. 7	4. 36. 33 N	— 24	— 1
	25	18. 48. 20	11. 16. 15. 20	3. 58. 22 N	+ 37	— 40
	26	19. 31. 57	11. 28. 52. 52	3. 8. 4 N	— 30	+ 3
June	4	2. 43. 24	3. 23. 20. 51	5. 3. 27 S	+ 41	— 13
	7	5. 27. 55	5. 8. 28. 49	4. 19. 31 S	+ 19	0
	8	6. 18. 35	5. 22. 58. 34	3. 28. 53 S	— 26	+ 3
	9	7. 8. 14	6. 7. 9. 52	2. 26. 18 S	— 18	— 8
	10	7. 57. 38	6. 21. 3. 57	1. 16. 3 S	+ 41	— 3
	11	8. 47. 18	7. 4. 42. 29	0. 2. 54 S	+ 29	+ 1

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1753		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
June	12	9. 37. 30	7. 18. 7. 7	1. 9. 40 N	+ 23	— 45
	18	14. 34. 9	10. 4. 39. 3	5. 5. 45 N	+ 1	— 26
	19	15. 18. 26	10. 16. 54. 16	4. 58. 29 N	+ 10	— 19
	21	16. 44. 2	11. 11. 21. 57	4. 4. 13 N	+ 18	— 18
	23	18. 10. 12	0. 6. 17. 55	2. 23. 18 N	— 16	+ 2
	24	18. 55. 33	0. 19. 10. 18	1. 19. 20 N	— 9	+ 1
	26	20. 34. 58	1. 16. 12. 40	1. 4. 2 S	— 23	— 19
July	2	1. 28. 5	4. 1. 55. 52	5. 2. 8 S	+ 46	+ 15
	5	4. 14. 8	5. 18. 1. 57	3. 35. 31 S	+ 42	— 22
	6	5. 5. 18	6. 2. 38. 56	2. 33. 58 S	+ 30	+ 12
	7	5. 55. 26	6. 16. 49. 54	1. 25. 32 S	+ 20	— 4
	8	6. 45. 13	7. 0. 37. 17	0. 13. 17 S	+ 18	+ 7
	9	7. 35. 3	7. 14. 4. 7	0. 57. 32 N	+ 22	0
	10	8. 25. 9	7. 27. 14. 21	2. 3. 51 N	+ 5	— 3
	12	10. 5. 17	8. 22. 55. 43	3. 51. 6 N	+ 9	— 15
	13	10. 54. 28	9. 5. 31. 45	4. 27. 8 N	— 13	— 2
	15	12. 30. 59	10. 0. 22. 57	4. 59. 53 N	— 6	— 32
	17	13. 59. 23	10. 24. 53. 7	4. 36. 36 N	0	— 28
	19	15. 24. 18	11. 19. 20. 8	3. 22. 54 N	+ 11	— 30
	23	18. 24. 53	1. 10. 14. 9	0. 46. 40: S	+ 4	— 22
	25	20. 11. 55	2. 8. 6. 35	3. 0. 54 S	— 39	— 17
	26	21. 10. 17	2. 22. 52. 38	3. 56. 38: S	— 47	— 36
Aug. New Quadrant	9	8. 51. 44	9. 1. 35. 20	4. 25. 42 N	— 14	— 30
	11	10. 26. 34	9. 26. 22. 51	5. 1. 5 N	— 19	— 31
	16	14. 6. 1	11. 27. 41. 59	2. 37. 19 N	+ 2	+ 14
	18	15. 33. 48	0. 22. 43. 34	0. 31. 51 N	+ 1	+ 2
	19	16. 20. 24	1. 5. 34. 30	0. 36. 48 S	— 5	— 1
	20	17. 9. 36	1. 18. 45. 6	1. 45. 3 S	— 12	— 4
	21	18. 1. 44½	2. 2. 20. 16	2. 49. 49 S	— 16	— 10
	24	20. 53. 59	2. 16. 3. 34	4. 59. 23:: S	— 49	— 8
	25	21. 52. 33	4. 1. 33. 3	5. 5. 32 S	— 60	— 31
Sept.	7	8. 23. 46½	9. 22. 19. 19	5. 7. 54 N	+ 3	— 31
	10	10. 37. 16	10. 29. 3. 58	4. 23. 50 N	— 15	— 20
	14	13. 32. 37	0. 18. 48. 1	0. 45. 17 N	— 13	— 7
	15	14. 18. 41	1. 1. 36. 4	0. 24. 33 S	— 27	— 11
	17	15. 57. 27	1. 27. 56. 23	2. 40. 43 S	— 30	— 16

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1753		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Sept.	18	16. 50. 27	2. 11. 34. 43	3. 39. 43 S	— 35	— 18
	19	17. 45. 30	2. 25. 35. 17	4. 27. 16 S	— 36	— 11
	20	18. 41. 56	3. 9. 59. 32	4. 59. 40 S	— 37	— 12
	21	19. 38. 55	3.24.47.18::	5. 14. 23 S	— 44::	— 72
Oct.	1	3. 48. 30	8. 9. 2. 33	3. 32.14: N	+ 39	— 3:
	2	4. 40. 16	8. 22. 17. 15	4. 20. 9 N	+ 39	- 1
	4	6. 18. 48	9. 17. 45. 25	5. 12. 11 N	+ 18	— 10
	5	7. 5. 19	10. 0. 8. 25	5. 15. 50 N	+ 8	— 19
	6	7. 50. 14	10. 12. 24. 14	5. 5. 1 N	— 8	— 18
	7	8. 33. 55	10. 24. 37. 26	4. 40. 18 N	— 14	— 14
	8	9. 16. 53½	11. 6. 52. 38	4. 2. 44 N	— 17	— 10
	10	10. 43. 3	0. 1. 42. 52	2. 14. 49 N	— 19	— 4
	11	11. 27. 26	0. 14. 23. 10	1. 8. 35 N	— 10	— 8
	13	13. 3. 46	1. 10. 24. 54	1. 14. 40 S	— 7	— 6
	14	13. 54. 14	1. 23. 47. 24	2. 24. 2 S	— 16	— 2
	15	14. 46. 55	2. 7. 25. 27	3. 26. 42 S	— 22	— 5
	16	15. 41. 23	2. 21. 19. 15	4. 18. 28 S	—35	— 6
	19	18. 27. 53	4. 4. 29. 22	5. 14. 29 S	— 4	+ 2
	30	3. 20. 29	8. 28. 29. 27	4. 40. 22 N	+ 6	+ 68
	31	4. 10. 39	9. 12. 26. 20	5. 7. 0 N	+ 15	— 14
Nov.	2	5. 44. 38	10. 7. 29. 16	5. 11. 9 N	+ 15	— 8
	4	7. 12. 1	11. 1. 58. 0	4. 18. 59 N	— 6	— 13
	5	7. 54. 39	11. 14. 13. 9	3. 34. 38 N	— 20	— 20
	8	10. 6. 51	0. 22. 1. 45	0. 26. 48 N	— 5	— 13
	10	11. 46. 3½	1. 18. 40. 55	1. 57. 12 S	+ 1	+ 9
	11	12. 40. 12	2. 2. 30. 7	3. 3. 43 S	— 4	+ 3
	13	14. 31. 49½	3. 0. 57. 23	4. 42. 31 S	— 16	+ 11
	16	17. 18. 38	4. 14. 47. 42	4. 57. 41 S	— 6	+ 5
	18	19. 3. 27	5. 14. 8. 49	3. 31. 29 S	+ 6	+ 2
	19	19. 54. 45	5. 28. 45. 8	2. 26. 19 S	+ 28	— 6
	20	20. 46. 7	6.13.16.54::	1. 12. 11 S	+ 26::	— 16
	21	21. 38. 5	6. 27. 42. 23	0. 7.27:: N	+ 87	— 52::
	29	3. 37. 28½	10. 2. 12. 23	5. 7. 51 N	— 1	— 6
	30	4. 22. 50	10. 14. 37. 1	4. 53. 31 N	— 14	— 12
Dec.	2	5. 49. 10	11. 9. 3. 55	3. 46. 2 N	+ 1	— 12
	3	6. 31. 29	11. 21. 16. 57	2. 56. 7 N	+ 2	— 21

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1753		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Dec.	6	8. 44. 36½	0.29. 7. 38::	0. 17. 33 S	— 15::	+ 12
	7	9. 33. 32	1. 12. 25. 30	1. 27. 51 S	+ 6	+ 24
	8	10. 25. 35	1. 26. 9. 48	2. 35. 22 S	+ 17	+ 24
	9	11. 20. 39	2. 10. 20. 45	3. 35. 22 S	+ 4	+ 21
	17	18. 43. 11	6. 8. 49. 22	1. 24. 51 S	+ 18	— 14
	29	3. 44. 38	11. 4. 8. 58	3. 50. 21 N	— 33	— 24
	30	4. 26. 52	11. 16. 17. 55	3. 2. 54 N	— 15	— 9
	31	5. 8. 58	11. 28. 28. 4	2. 7. 46 N	— 5	— 14
1754 Jan.	2	6. 35. 55	0. 23. 16. 10	0. 0. 34 N	— 11	— 33
	3	7. 22. 24	1. 6. 6. 36	1. 7. 18 S	+ 4	— 6
	5	9. 4. 36	2. 3. 9. 52	3. 14. 11 S	+ 1	+ 11
	6	10. 0. 34½	2. 17. 29. 1	4. 5. 1 S	— 11	+ 3
	7	10. 58. 59½	3. 2. 18. 39	4. 41. 21 S	+ 12	+ 18
	8	11. 58. 33	3. 17. 33. 13	4. 59. 5 S	+ 18	+ 11
	9	13. 0. 10	4. 3. 4. 35	4. 55. 3 S	+ 31	+ 10
	11	14. 53. 40½	5. 4. 7. 0	3. 43. 53 S	+ 1	+ 7
	17	20. 5. 48	8. 0. 17. 40	3. 7. 56 N	— 21	+ 5
	18	20. 57. 24½	8. 13. 36. 46	3. 57. 25: N	— 17	— 16:
	26	2. 24. 4	11. 11. 49. 0	3. 8. 5:: N	— 24	+ 23::
	30	5. 15. 44	1. 0. 48. 58	0. 56. 33 S	— 25	— 1
	31	6. 2. 29	1. 13. 34. 10	2. 1. 22 S	— 14	0
Feb.	3	8. 40. 27	2. 24. 35. 44::	4. 34. 53 S	+ 22::	0
	4	9. 38. 26	3. 9. 22. 40	4. 58. 45 S	— 9	+ 7
	5	10. 37. 37	3. 24. 39. 57	5. 2. 41 S	— 5	+ 2
	6	11. 36. 46	4. 10. 19. 51	4. 44. 20 S	+ 3	+ 1
	13	18. 2. 18	7. 26. 1. 49	3. 4. 59 N	— 54	— 10
	18	22. 11. 54½	10. 0. 52. 43::	5. 0. 7 N	— 22::	+ 3
	28	4. 45. 59	1. 21. 48. 13	2. 53. 32 S	— 41	— 10
Mar.	1	5. 35. 56	2. 4. 54. 9	3. 47. 56 S	— 23	— 14
	2	6. 28. 30	2. 18. 26. 3	4. 31. 37 S	- 22	— 13
	3	7. 23. 21	3. 2. 27. 20	5. 0. 50 S	— 17	— 9
	4	8. 19. 56	3. 17. 0. 7	5. 12. 19 S	— 17	— 6
	5	9. 17. 25	4. 2. 3. 15	5. 3. 7 S	— 26	— 9
	6	10. 15. 3	4. 17. 32. 7	4. 31. 52 S	— 31	— 1
	7	11. 12. 15	5. 3. 18. 10	3. 39. 44 S	— 12	0
	9	13. 7. 9½	6. 4. 59. 25	1. 9. 18 S	+ 25	+ 10

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1754		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Mar.	28	3. 32. 26	2. 0.41.18::	3. 37. 21::S	— 47::	— 11::
	31	6. 10. 23½	3. 11. 21. 37	5. 15. 53 S	— 16	— 18
Apr.	2	8. 0. 48½	4. 10. 26. 10	4. 52. 45 S	— 23	+ 1
	3	8. 56. 9	4. 25. 33. 6	4. 10. 41 S	— 21	— 2
	4	9. 51. 24	5. 10. 57. 32	3. 9. 46 S	— 22	+ 4
	5	10. 46. 40	5. 26. 32. 28	1. 54. 13 S	— 8	+ 6
	7	12. 40. 27	6. 27. 39. 7	0. 55. 49 N	+ 39	+ 3
	8	13. 36. 45	7. 12. 51. 10	2. 16. 13 N	+ 41	— 13
	12	17. 14. 38	9. 9. 14. 47	5. 14. 28 N	+ 5	— 8
	14	18. 51. 36		A.R.	— 15	
	28	5. 0. 26	3. 21. 3. 55	5. 14. 24 S	+ 23	+ 3
	30	6. 48. 8	4. 19. 54. 55	4. 26. 14 S	+ 14	— 8
May	1	7. 41. 24½	5. 4. 42. 22	3. 34. 5 S	+ 21	+ 3
	2	8. 34. 36	5. 19. 41. 55	2. 26. 51 S	+ 4	+ 8
	3	9. 28. 8	6. 4. 50. 7	1. 8. 52 S	0	+ 7
	4	10. 22. 27	6. 20. 1. 59	0. 14. 7 N	— 2	— 10
	5	11. 17. 45	7. 5. 10. 56	1. 36. 2 N	+ 5	— 14
	6	12. 15. 6	7. 20. 10. 44	2. 50. 22 N	+ 12	— 24
	17	21. 6. 56	0. 13. 39. 1	0. 19. 33 N	— 32	— 47
				A.R.	— 11	
	18	21. 51. 12		A.R.	— 13	
	28	5. 37. 43	5. 0. 5. 7	3. 42. 43 S	+ 21	— 4
	30	7. 21. 41	5. 29. 26. 15	1. 29. 32 S	0	— 1
	31	8. 13. 57	6. 14. 10. 58	0. 11. 18 S	+ 25	+ 5
June	2	10. 1. 25	7. 13. 37. 42	2. 21. 24 N	+ 5	0
	3	10. 56. 44	7. 28. 12. 33	3. 25. 16 N	— 8	— 13
	5	12. 49. 57	8. 26. 43. 0	4. 47. 43::N	— 7	+ 8::
	6	13. 43. 36	9. 10. 28. 49	5. 3. 22 N	— 11	— 11
	14	19. 45. 14½	0. 20. 57. 10	0. 30. 47: S	— 31	— 1:
	24	3. 34. 16	4. 25. 32. 31	3. 46. 35 S	+ 33	— 17
	29	7. 55. 31	7. 8. 37. 58	2. 7. 5 N	+ 18	— 5
July	2	10. 37. 48	8. 21. 2. 50	4. 38. 16 N	— 21	— 20
	4	12. 25. 51	9. 18. 16. 29	4. 59. 21 N	— 19	— 17
	13	19. 9. 9	1. 10. 43. 43	2. 24. 35 S	— 11	+ 11
	22	2. 20. 30	5. 4. 53. 12	2. 59. 41::S	+ 12	— 3::

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1754		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
July	25	5. 0. 4½	6. 19. 49. 9	0. 46. 12 N	+ 4	+ 13
	31	10. 17. 34	9. 13. 27. 27	5. 3. 30 N	— 15	— 11
Aug.	1	11. 7. 46	9. 26. 35. 16	4. 52. 13 N	— 27	— 18
	2	11. 55. 57½	10. 9. 28. 55	4. 26. 6 N	— 34	— 26
	3	12. 44. 14	10. 22. 10. 1	3. 46. 52 N	— 25	— 21
	4	13. 28. 36½	11. 4. 37. 35	2. 57. 16 N	— 15	— 16
	8	16. 19. 6	0. 23. 23. 3	1. 12. 18 S	— 6	+ 16
	9	17. 3. 13	1. 5. 40. 20	2. 14. 39 S	— 12	+ 11
	10	17. 49. 13	1. 18. 11. 13	3. 11. 50 S	— 20	+ 5
	13	20. 22. 13	2. 28. 1. 43	5. 1. 55 S	— 39	+ 11
	14	21. 17. 52	3. 12. 17. 10	5. 7. 36 S	— 30	+ 28
	21	2. 52. 30	6. 14. 10. 43	0. 26. 55 N	+ 43	+ 28
	23	4. 41. 10	7. 13. 59. 20	2. 58. 12 N	+ 20	+ 4
	25	6. 29. 15	8. 12. 20. 37	4. 38. 19 N	+ 6	+ 4
	26	7. 22. 23	8. 25. 59. 55	5. 3. 49 N	+ 12	— 13
	27	8. 14. 16	9. 9. 20. 46	5. 11. 59 N	+ 13	— 14
	28	9. 4. 29	9. 22. 25. 20	5. 3. 38 N	0	— 17
	30	10. 39. 12	10. 17. 53. 0	4. 3. 6 N	— 22	— 22
	31	11. 23. 55	11. 0. 20. 13	3. 14. 57 N	— 40	— 21
Sept.	1	12. 8. 19	11. 12. 38. 50	2. 18. 4 N	— 17	— 20
	2	12. 51. 53	11. 24. 51. 28	1. 15. 18 N	— 17	— 24
	4	14. 16. 42	0. 19. 7. 45	0. 57. 23 S	— 16	+ 14
	5	15. 0. 6	1. 1. 18. 41	2. 1. 40 S	— 10	+ 9
	6	15. 44. 53	1. 13. 37. 8	3. 1. 9 S	— 6	+ 3
	8	17. 20. 18	2. 8. 56. 26	4. 34. 30 S	— 14	— 2
	11	19. 59. 5	3. 19. 52. 2	5. 10. 0 S	— 41	+ 5
	12	20. 54. 49		A.R.	+ 52::	
	21	4. 22. 7	8. 7. 16. 47	4. 31. 35 N	+ 38	— 6
	22	5. 16. 59	8. 21. 24. 0	5. 3. 35 N	+ 24	— 11
	23	6. 10. 14	9. 5. 4. 15	5. 17. 15 N	+ 22	— 18
	24	7. 1. 26	9. 18. 20. 19	5. 13. 10 N	+ 19	— 9
	25	7. 50. 25	10. 1. 15. 46	4. 53. 19 N	+ 18	— 9
	26	8. 37. 14½	10. 13. 54. 37	4. 19. 35 N	+ 9	— 9
	27	9. 22. 13	10. 26. 20. 54	3. 34. 5 N	— 2	— 16
	28	10. 5. 46	11. 8. 38. 8	3. 39. 2 N	— 10	— 10
	29	10. 48. 25	11. 20. 49. 38	1. 37. 12 N	— 15	— 10
	30	11. 30. 41½	0. 2. 58. 20	0. 31. 9 N	— 7	— 9

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long,	Error of Tab. in Lat.
1754		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Oct.	1	12. 15. 12	0. 15. 8. 9	0. 36. 23 S	— 5	+ 10
	3	13. 42. 48	1. 9. 36. 55	2. 44. 15 S	— 5	+ 6
	6	16. 5. 55	2. 17. 31. 0	4. 56. 45 S	— 11	— 10
	7	16. 57. 3	3. 0. 40. 59	5. 14. 48 S	— 3	— 7
	9	18. 42. 53	3. 28. 8. 52	4. 59. 28 S	+ 2	— 16
	10	19. 36. 51	4. 12. 31. 27	4. 23. 28 S	— 9	+ 3
	20	4. 0. 59	8. 29. 33. 10	5. 12. 28 N	+ 33	— 7
	21	4. 54. 40	9. 13. 21. 41	5. 15. 8 N	+ 25	— 14
	22	5. 45. 40	9. 26. 41. 23	5. 0. 27 N	+ 21	— 14
	23	6. 33. 57	10. 9. 36. 14	4. 30. 46 N	+ 18	— 11
	24	7. 19. 50½	10. 22. 11. 21	3. 48. 43 N	+ 21	— 25
	26	8. 46. 43	11. 16. 44. 27	1. 57. 12 N	+ 5	— 5
	28	10. 11. 17	0. 11. 0. 54	0. 13. 45 S	— 2	+ 6
	29	10. 54. 15	0. 23. 12. 50	1. 19. 54 S	+ 12	+ 12
Nov.	5	16. 37. 45	3. 23. 29. 17	5. 0. 29 S	+ 9	+ 2
	6	17. 30. 9	4. 7. 21. 35	4. 31. 49 S	+ 19	— 1
	7	18. 22. 30	4. 21. 32. 32	3. 46. 3 S	+ 24	— 6
	8	19. 14. 54		A.R.	+ 17	
	10	21. 1. 22	6. 6. 1. 58	0. 10. 28 S	— 1	— 2
	11	21. 56. 19		A.R.	— 10	
	18	3. 35. 36	9. 20. 50. 37	4. 59. 58 N	0	— 4
	19	4. 26. 32	10. 4. 16. 53	4. 35. 8 N	0	— 9
	20	5. 14. 31	10. 17. 16. 3	3. 56. 35 N	+ 8	— 7
	21	5. 59. 58	10. 29. 53. 6	3. 7. 31 N	+ 2	— 6
	24	8. 8. 15	0. 6. 32. 40	0. 3. 45 N	— 2	— 13
	26	9. 34. 28	1. 0. 58. 40	2. 3. 51 S	— 3	+ 13
	27	10. 19. 42	1. 13. 25. 45	3. 1. 24 S	+ 13	+ 10
	28	11. 6. 53	1. 26. 6. 29	3. 50. 40 S	+ 24	+ 17
	29	11. 56. 7	2. 9. 2. 15	4. 29. 9 S	+ 33	+ 16
	30	12. 49. 22	2. 22. 14. 22	4. 54. 1 S	+ 50	+ 18
Dec.	1	13. 41. 42	3. 5. 40. 29	5. 3. 8. S	+ 24	+ 21
	9	20. 39. 57	7. 0. 2. 11	2. 4. 52 N	+ 6	— 4
	17	3. 5. 11½	10. 11. 22. 41	4. 2. 17 N	— 30	+ 6
	18	3. 52. 49	10. 24. 24. 38	3. 15. 23 N	— 20	— 2
	19	4. 38. 0	11. 7. 4. 20	2. 19. 53 N	— 3	— 10
	20	5. 21. 26½	11. 19. 27. 25	1. 18. 50 N	— 4	— 13
	26	9. 47. 48	2. 3. 39. 40	4. 19. 31 S	+ 16	+ 26
	28	11. 31. 2½	3. 0. 20. 28	4. 59. 37 S	+ 33	+ 23

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1755		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Jan.	3	16. 51. 44	5. 26. 1. 46	0. 35. 45 S	— 7	+ 6
	15	2. 30. 34½	11. 1. 29. 9	2. 32. 29 N	— 52	+ 5
	17	3. 58. 37	11. 26. 30. 59	0. 26. 12 N	— 33	— 4
	22	7. 38. 16	1. 27. 54. 30	4. 15. 38 S	— 31	+ 17
	23	8. 27. 12½	2. 10. 46. 39	4. 46. 41 S	— 8	+ 13
	24	9. 18. 31	2. 24. 2. 21	5. 3. 20 S	+ 1	+ 18
	27	12. 2. 46½	4. 6. 17. 16	4. 8. 57 S	+ 26	+ 15
	31	15. 39. 25	6. 5. 52. 20	0. 29. 54 N	— 10	+ 2
Feb.	1	16. 32. 18	6. 20. 43. 54	1. 48. 9 N	— 28	— 9
	2	17. 25. 32½	7. 5. 27. 17	2. 58. 26 N	— 27	— 8
	3	18. 19. 28	7. 20. 1. 17	3. 56. 33 N	— 30	— 14
	18	5. 30. 48	1. 22. 35. 58	4. 10. 48 S	— 30	+ 8
Mar.	17	3. 26. 23	1. 18. 2. 12	3. 58. 56 S	— 31	+ 8
	22	7. 31. 42	3. 22. 11. 46	4. 53. 23 S	— 30	— 22
	23	8. 24. 54	4. 6. 10. 47	4. 14. 47 S	— 25	— 9
	25	10. 13. 17	5. 5. 36. 20	2. 8. 28 S	— 14	— 14
	28	13. 2. 44	6. 22. 24. 25	2. 4. 35 N	+ 44	— 2
	29	14. 0. 3	7. 8. 7. 56	3. 19. 6 N	+ 54	— 6
Apr.	16	3. 44. 11	2. 21. 10. 6	5. 11. 40 S	— 4	— 65
	17	4. 33. 41	3. 3. 56. 53	5. 12. 40 S	— 12	— 17
	18	5. 24. 8	3. 17. 0. 15	4. 58. 37 S	0	— 24
	19	6. 15. 22	4. 0. 24. 19	4. 27. 58 S	+ 8	— 17
	20	7. 7. 9	4. 14. 12. 22	3. 41. 14 S	+ 11	— 17
	22	8. 52. 25	5. 13. 10. 24	1. 25. 40 S	— 13	— 8
	25	11. 38. 31	6. 29. 40. 48	2. 39. 37 N	+ 10	— 8
	26	12. 39. 24	7. 15. 34. 23	3. 46. 45 N	+ 40	— 9
May	3	19. 4. 18	10. 26. 21. 19	2. 45. 40 N	— 10	— 9
	4	19. 49. 17	11. 8. 57. 49	1. 44. 9 N	— 12	— 3
	17	5. 2. 7½	4. 9. 26. 34	3. 47. 27 S	+ 34	— 7
	18	5. 52. 51½	4. 23. 10. 15	2. 52. 30 S	+ 32	— 10
	19	6. 43. 46	5. 7. 15. 2	1. 45. 30 S	+ 31	— 6
	20	7. 35. 16	5. 21. 43. 17	0. 30. 19 S	+ 13	— 11
	22	9. 22. 10	6. 21. 50. 12	2. 6. 35 N	— 25	— 1
	23	10. 18. 33	7. 7. 22. 15	3. 16. 23 N	— 22	— 18
	26	13. 19. 47	8. 24. 12. 15	5. 2. 36 N	+ 32	— 15

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1755		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
May	27	14. 18. 51	9. 9.15.29	4.55.40 N	+ 36	— 14
	28	15. 15. 23	9.23.48.30	4.29.41 N	+ 24	— 19
	29	16. 8. 37	10. 7.48.24	3.48. 0 N	+ 16	— 14
June	1	18. 30. 2	11.16.55. 0	0.49.40 N	— 11	+ 7
	2	19. 13. 11	11.29.17. 5	0.15.51 S	— 19	— 9
	3	19. 55. 39	0.11.29.22	1.19.45 S	— 18	— 10
	16	5. 31. 6	5.16.53.49	0.41. 2 S	+ 31	— 8
	19	8. 7. 3	7. 0.49.10	2.58.45 N	+ 5	— 5
	20	9. 2. 41	7.15.59. 9	3.56.13 N	— 16	— 15
	21	10. 0. 28	8. 1.18.10	4.36.38 N	+ 32	+ 19
	24	12. 59. 54	9.16.42.42	4.37.42 N	— 1	— 26
	25	13. 55. 40	10. 1.10.22	3.59.38 N	+ 5	— 22
July	4	20. 47. 0	1.25.44. 5	4.28.53 S	— 5	+ 24
	14	4. 19. 39	5.26.56.36	0.26. 8 N	+ 14	+ 11
	15	5. 10. 36½	6.11.23. 7	1.41.38 N	+ 16	+ 16
	18	7. 51. 11	7.25.33.53	4.34.20 N	+ 11	— 2
	20	9. 45. 59	8.25.20. 4	5. 5.24 N	— 5	— 14
	24	13. 27. 37	10.22.31.13	2.28.25 N	— 6	— 24
	25	14. 16. 1	11. 5.53.57	1.21.46 N	— 1	— 23
	30	17. 56. 20	1. 8.29.24	3.47.55 S	— 7	+ 23
	31	18. 40. 53½	1.20.43.41	4.27.27 S	— 2	+ 11
Aug.	14	5. 47. 7	7.21. 4. 0	4.32.43 N	+ 8	+ 22
	15	6. 42. 41	8. 5.45.35	5. 3. 9 N	+ 21	+ 7
	16	7. 39. 5	8.20.21.17	5.13.38 N	+ 18	— 2
	17	8. 35. 33	9. 4.48.21	5. 4. 3 N	+ 11	— 4
	18	9. 31. 10	9.19. 3.46	4.35.59 N	+ 10	— 24
	19	10. 25. 3	10. 3. 4.55	3.51.29 N	— 8	— 25
	21	12. 6. 59	11. 0.16.20:	1.48.18 N	— 19:	— 27
	22	12. 55. 1	11.13.25. 6	0.38. 5 N	— 15	— 20
	24	14. 24. 11	0. 8.52.13	1.40.35 S	+ 8	+ 21
	27	16. 35. 3		A.R.	+ 10	
Sept.	13	6. 31. 14½	9. 0.28.11	5.12.25 N	+ 31	0
	14	7. 26. 39	9.14.39.33	4.49.36 N	+ 28	— 24
	15	8. 20. 17	9.28.32.54	4. 9.48 N	+ 29	— 27
	16	9. 11. 44½	10.12. 8.51	3.16.45 N	+ 14	— 25

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1755		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Sept.	17	10. 0.55	10.25.28.12	2.13.50 N	+ 4	— 14
	18	10.48. 0	10. 8.32.27	1. 5.12 N	— 6	— 21
	27	17.35.58	3. 0.21.54	5.11.23 S	+ 27	— 1
	29	19.16. 0	3.26.15. 9	4.15.55 S	+ 15	— 1
Oct.	1	20.59.18	4.23.45.22	2.21.14:: S	0	— 6::
	10	4.24.46	8.25.37. 3	5.12.17 N	+ 22	+ 2
	15	8.45.53	11. 4.24.37	1.24.55 N	+ 10	— 25
	16	9.31.12	11.17.10.44	0.16. 2 N	+ 3	— 19
	17	10.15.13	11.29.45. 6	0.52.28 S	0	+ 16
	21	13.11.38		A.R.	+ 10	
	22	13.56.56½	2. 1.13.23	4.53.31 S	+ 29	+ 1
	24	15.30.52	2.25.50.36	5. 7. 6 S	+ 22	+ 1
	25	16.19.16	3. 8.20. 5	4.52.15 S	+ 43	+ 5
	28	18.48. 0½	4.17.23.34	2.43.30 S	+ 50	— 8
Nov.	9	5. 3.40	10. 3.16.47	3.37.23 N	— 7	— 12
	10	5.55.22	10.17. 1.35	2.40. 3 N	— 14	— 20
	11	6.43.58	11. 0.18.20	1.35.27 N	— 2	— 9
	12	7.30. 2	11.13.12. 5	0.27.57 N	— 9	— 2
	13	8.14.16	11.25.48.37	0.39. 8 S	— 6	+ 14
	15	9.40.19	0.20.30.15	2.11.54 S	— 11	+ 7
	22	15. 4.57	3.16.52.36	4.21.38 S	+ 32	+ 3
	23	15.53.56	3.29.37.32	3.42. 0 S	+ 39	+ 4
	25	17.31.49½	4.25.51.37	1.48.12 S	+ 53	— 1
	26	18.21. 0½	5. 9.29. 2	0.38.27 S	+ 54	— 7
Dec.	9	5.26. 2	11. 8.28.28	0.37.13 N	— 40	— 18
	10	6.11.46	11.21.24.53	0.31.23 S	— 39	+ 2
	14	9. 5. 3	1.10.48.54	4. 8.16 S	— 16	+ 7
	16	10.35.14	2. 5.17.59	4.55.43 S	+ 4	+ 9
	20	13.51.30½	3.25.39. 7	3.44.51 S	+ 32	+ 16
	21	14.40.49	4. 8.36.31	2.54. 6 S	+ 19	+ 15
	23	16.18.19	5. 5. 6.43	0.44.50 S	+ 6	+ 25
	27	19.38.49	7. 1.42.37	3.46.28 N	+ 18	— 3
	28	20.33.53	7.16.48. 5	3.31.17 N	+ 2	— 1

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1756		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Jan.	5	3. 16. 19		A.R.	— 46	
	7	4. 50. 32	11. 28. 53. 29	1. 26. 22 S	— 51	— 1
	10	7. 1. 30	1. 6. 17. 13	4. 7. 44 S	— 43	+ 2
	13	9. 17. 4	2. 13. 2. 56	5. 6. 31 S	— 17	+ 11
	15	10. 54. 12	3. 8. 11. 13	4. 35. 27 S	+ 12	+ 13
	16	11. 44. 8½	3. 21. 3. 14	3. 58. 18 S	+ 28	+ 13
	18	13. 26. 30	4. 17. 25. 44	2. 6. 31 S	+ 24	+ 23
	19	14. 16. 1	5. 0. 54. 49	0. 57. 7 S	+ 3	+ 18
	20	15. 5. 9	5. 14. 35. 42	0. 16. 47 N	— 8	— 18
	21	15. 54. 14	5. 28. 28. 59	1. 31. 1 N	— 20	— 20
	23	17. 34. 31	6. 26. 55. 18	3. 42. 6 N	— 11	— 21
	25	19. 21. 50	7. 26. 17. 23	5. 0. 38 N	— 4	— 10
Feb.	5	4. 11. 52	0. 18. 40. 27	3. 11. 51 S	— 35	0
	7	5. 39. 52	1. 13. 30. 53	4. 39. 0 S	— 35	— 3
	8	6. 24. 32½	1. 25. 45. 41	5. 3. 37 S	— 42	— 3
	10	7. 57. 21	2. 20. 21. 51	5. 10. 51 S	— 45	+ 4
	11	8. 45. 45	3. 2. 52. 50	4. 52. 31 S	— 33	+ 10
	13	10. 25. 33	3. 28. 38. 58	3. 32. 54 S	0	— 1
	14	11. 16. 10	4. 11. 57. 50	2. 33. 30 S	+ 16	0
	16	12. 59. 22	5. 9. 29. 4	0. 8. 1 S	+ 15	+ 9
	19	15. 31. 32	6. 22. 29. 8	3. 30. 25 N	— 20	— 12
	21	17. 17. 57	7. 21. 50. 21	4. 59. 39 N	— 21	— 12
	22	18. 13. 34	8. 6. 35. 31	5. 16. 10 N	— 18	— 10
Mar.	9	6. 37. 3	2. 27. 29. 59	5. 3. 46 S	— 40	+ 1
	12	9. 4. 49	4. 5. 47. 1	3. 2. 52 S	— 23	— 7
	13	9. 55. 12	4. 19. 11. 59	1. 57. 46 S	— 14	— 1
	16	12. 30. 40	6. 1. 47. 25	1. 52. 26 N	+ 32	+ 4
	20	16. 8. 20	8. 1. 54. 35	5. 11. 18 N	— 7	— 9
Apr.	9	7. 43. 57	4. 12. 56. 0	2. 23. 16 S	— 9	— 10
	10	8. 33. 30	4. 26. 18. 14	1. 15. 28 S	— 20	— 11
	11	9. 23. 33	5. 10. 7. 25	0. 1. 6 S	— 11	— 6
	12	10. 14. 27	5. 24. 26. 5	1. 15. 42 N	— 13	+ 3
	13	11. 6. 35	6. 9. 13. 10	2. 29. 51 N	— 2	+ 4
	14	12. 1. 33	6. 24. 25. 39	3. 35. 24 N	+ 23	+ 2
	22	19. 37. 34	10. 24. 1. 55	1. 23. 8 N	— 33	— 9

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1756		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
May	7	6. 24. 52	4. 20. 34. 37	1. 32. 37 S	+ 8	— 17
	8	7. 13. 15	5. 3. 49. 46	0. 23. 31 S	+ 7	— 14
	10	8. 52. 24½	6. 1. 45. 56	2. 1. 23 S	—21	+ 2
	12	10. 38. 44	7. 1. 48. 41	4. 3. 47 N	—10	— 7
	13	11. 35. 53	7. 17. 29. 33	4. 42. 40 N	+ 1	— 10
	15	13. 39. 44	8. 19. 20. 33	4. 54. 50 N	+33	— 18
	16	14. 41. 37	9. 5. 2. 47	4. 27. 10 N	+29	— 27
	17	15. 42. 0	9. 20. 21. 25	3. 40. 41 N	+ 8	— 29
	20	18. 24. 4½	11. 3. 14. 40	0. 20. 38 N	—42	— 17
	21	19. 11. 45	11. 16. 36. 7	0. 49. 58 S	—55	+ 7
June	1	2. 45. 32		A.R.	—11	
	3	4. 20. 56	4. 16. 4. 1	1. 40. 27 S	+ 1	— 37
	5	5. 55. 39	5. 12. 6. 19:	0. 35. 54: N	+25 :	— 2:
	6	6. 43. 39	5. 25. 41. 56	1. 45. 38 N	+ 4	+ 4
	8	8. 24. 18½	6. 24. 21. 56	3. 48. 46 N	—17	— 6
	10	10. 15. 59	7. 25. 4. 20	4. 57. 15 N	—36	— 16
	17	17. 7. 13	11. 11. 42. 36	0. 39. 30 S	—39	+ 13
	18	17. 54. 35½	11. 25. 7. 58	1. 48. 46 S	—38	+ 4
	19	18. 39. 55	0. 8. 9. 12	2. 50. 9 S	—44	+ 2
	20	19. 24. 3	0. 20. 51. 36	3. 41. 30 S	—46	— 1
	21	20. 7. 47	1. 3. 20. 18	4. 21. 17 S	—33	— 4
	22	20. 51. 48	1. 15. 40. 24	4. 48. 39: S	—25	— 27:
July	4	5. 28. 0	6. 4. 41. 54	2. 42. 28 N	+ 4	+ 5
	5	6. 16. 54	6. 18. 40. 50	3. 41. 1 N	— 2	+ 2
	6	7. 7. 56	7. 3. 6. 14	4. 27. 43 N	—13	— 7
	9	9. 59. 15	8. 18. 53. 0	4. 56. 12 N	—56	— 4
	10	11. 1. 19	9. 4. 38. 10	4. 22. 4 N	—49	— 26
	11	12. 3. 28	9. 20. 20. 2	3. 28. 1 N	—26	— 28
	13	14. 3. 20		A.R.	+23 ;	
Aug.	1	4. 14. 28	6. 14. 19. 8	3. 32. 35 N	—25	+ 14
	3	5. 55. 21	7. 12. 44. 42	4. 57. 49 N	— 7	+ 3
	5	7. 46. 25	8. 12. 25. 25	5. 10. 4 N	—21	+ 1
	6	8. 45. 44	8. 27. 37. 51	4. 44. 19 N	—34	— 9
	9	11. 14. 47	10. 13. 22. 2	1. 40. 31 N	—30	— 22

	Days, N.S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1756		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Aug.	10	12. 42. 37	10. 28. 13. 0	0. 19. 54 N	— 7	— 16
	12	14. 24. 41	11. 26. 40. 51	2. 13. 26 S	+ 17	+ 17
	13	15. 12. 8	0. 10. 16. 7	3. 17. 9 S	+ 13	+ 21
	14	15. 58. 6	0. 23. 27. 0	4. 8. 34 S	+ 27	+ 17
	15	16. 43. 19	1. 6. 17. 28	4. 45. 59 S	+ 25	+ 14
	28	2. 11. 55½		A.R.	— 7	
	31	4. 45. 26	7. 22. 56. 40	5. 13. 7 N	— 13	+ 2
Sept.	1	5. 40. 36½	8. 7. 37. 22	5. 15. 6 N	— 1	+ 11
	2	6. 37. 48	8. 22. 25. 20	4. 56. 39 N	+ 5	+ 1
	3	7. 36. 14½	9. 7. 17. 6	4. 18. 20 N	— 6	— 6
	6	10. 27. 50	10. 21. 34. 35	0. 56. 47 N	— 40	— 20
	7	11. 20. 53	11. 5. 59. 48	0. 22. 39 S	— 44	+ 22
	9	13. 2. 14	0. 3. 59. 3	2. 48. 13 S	— 12	— 21
	11	14. 35. 23	1. 0. 38. 3	4. 29. 54 S	+ 15	+ 18
	12	15. 21. 9	1. 13. 29. 29	4. 59. 17 S	+ 25	+ 14
	13	16. 6. 59	1. 26. 5. 21	5. 13. 24 S	+ 38	+ 11
	14	16. 53. 14	2. 8. 29. 43	5. 12. 37 S	+ 41	+ 8
	15	17. 40. 4½	2. 20. 47. 18	4. 57. 38 S	+ 32	— 5
	28	3. 35. 59½	8. 3. 6. 6	5. 11. 8 N	+ 8	+ 3
Oct.	1	6. 29. 18	9. 17. 31. 9	3. 35. 49 N	+ 7	+ 4
	2	7. 26. 8	10. 2. 3. 29	2. 32. 26 N	0	— 22
	3	8. 21. 0	10. 16. 24. 50	1. 20. 17 N	— 6	— 27
	4	9. 13. 54	11. 0. 34. 34::	0. 4. 8 N	— 26::	— 24
	5	10. 3. 49	11. 14. 30. 41	1. 10. 39 S	— 6	+ 41
	7	11. 39. 20	0. 11. 44. 46	3. 20. 47 S	— 51	+ 23
	9	13. 13. 38	1. 8. 1. 34	4. 43. 30 S	— 4	+ 1
	11	14. 46. 6	2. 3. 22. 9	5. 6. 44 S	+ 20	+ 2
	12	15. 32. 58	2. 15. 45. 38	4. 56. 24 S	+ 38	— 1
	16	18. 43. 23	4. 4. 57. 31	2. 12. 25 S	+ 32	— 36
	29	5. 22. 0½	9. 27. 41. 47	2. 40. 2 N	— 21	— 27
	30	6. 17. 46	10. 12. 9. 4	1. 30. 6 N	— 31	— 22
Nov.	1	8. 0. 55	11. 10. 6. 25	0. 56. 52 S	— 27	+ 30
	3	9. 35. 27	0. 7. 0. 54	3. 5. 29 S	— 46	— 26
	4	10. 21. 6	0. 20. 9. 27	3. 54. 42 S	— 57	+ 24
	5	11. 6. 28	1. 3. 6. 47	4. 30. 56 S	— 58	+ 18
	6	11. 52. 4½	1. 15. 53. 55	4. 53. 1 S	— 53	+ 8

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1756		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Nov.	7	12. 38. 13	1. 28.31.38	5. 0. 6 S	— 35	+ 11
	8	13. 27. 5	2. 11. 0. 5	4. 52. 49 S	— 19	— 3
	10	15. 2. 1	3. 5.35. 3	2. 58. 3 S	+ 15	+ 6
	11	15. 49. 37	3. 17.47. 5	3. 13. 50 S	+ 28	— 15
	15	18. 57. 10	5. 7.46. 8	0. 53. 45 N	+ 47	+ 17
	27	5. 6. 38	10. 21.42. 5	0. 24. 12 N	— 66	— 14
	28	5. 58. 39	11. 5.51.25	0. 50. 32 S	— 63	+ 14
Dec.	3	9. 49. 29	1. 11.39.48	4. 51. 54 S	— 47	+ 14
	8	13. 45. 36	3. 13.32. 7::	3. 19. 28::S	+ 11::	+ 15::
	13	17. 37. 41		A.R.	+ 54	
	14	18. 23. 46	5. 28.44.29	2. 53. 16 N	+ 58	— 51
	16	20. 0. 28	6. 26.28.55	4. 30. 22 N	+ 15	— 15
	30	7. 48. 11	1. 7.41.18	4. 57. 9 S	— 54	+ 3
1757 Jan.	2	10. 5. 10	2. 14.58.24	4. 47. 18 S	— 39	— 3
	3	10. 52. 23	2. 27.13.48	4. 16. 32 S	— 23	— 8
	5	12. 30. 7	3. 21.43.26	2. 41. 4 S	— 8	+ 1
	7	14. 4. 18	4. 16.19.53	0. 35. 11 S	— 4	+ 4
	16	21. 29. 21	8. 19.32.46	4. 41. 13::N	— 6	— 49::
	25	4. 58. 20	0. 19.51.16	4. 26. 14 S	— 52	— 4
	27	6. 29. 57	1. 15.52. 0	5. 14. 15 S	— 40	— 3
	29	8. 1. 50	2. 10.47.43	5. 0. 48 S	— 38	— 3
	30	8. 48. 43	2. 23. 3.14	4. 33. 0 S	— 30	— 1
Feb.	1	10. 24. 2	3. 17.29.57 :	3. 2. 17::S	— 23 :	— 8::
	3	11. 59. 6	4. 12. 9.42	0. 57. 2 S	+ 15	— 8
	6	14. 19. 28	5. 20.12.57::	2. 27. 54 N	— 18::	+ 3
	7	15. 5. 3	6. 3.17.23 :	3. 27. 51 N	— 24 :	— 10
	23	4. 22. 44	1. 10.26.33	5. 9. 47 S	— 20	+ 5
	25	5. 56. 10	2. 6. 1.15	5. 7. 58 S	— 27	— 3
	27	7. 30. 42	3. 0.41.27	4. 8. 53 S	— 28	+ 1
	28	8. 18. 25	3. 12.54. 1::	3. 22. 12::S	— 22::	— 19::
Mar.	1	9. 6. 10	3. 25. 8.30	2. 25. 45 S	— 23	12
	2	9. 53. 41	4. 7.28.49	1. 22. 16 S	— 15	— 12
	4	11. 27. 22	5. 2.40.32	0. 55. 35 N	+ 17	+ 14
	5	12. 14. 42	5. 15.37.14	2. 3. 57 N	+ 28	0
	7	13. 48. 43	6. 12.16.53	3. 59. 58 N	0	+ 10

	Days, N.S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1757		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Mar.	10	16. 17. 26	7. 24. 7.50	5. 13. 14 N	— 7	— 6
	11	17. 11. 30	8. 8.31.53	5. 0. 54 N	— 25	— 12
	13	19. 6. 10	9. 7.51.10:	3. 58. 56 N	— 7	+ 7:
	26	5. 23. 25	2. 25.40.34	4. 16. 34 S	— 21	+ 6
	27	6. 11. 22	3. 7.57.40	3. 33. 59 S	— 18	— 2
	28	6. 59. 11	3. 20.10.47	2. 41. 28 S	— 28	— 2
	29	7. 46. 39½	4. 2.25.25	1. 41. 36 S	— 35	— 6
Apr.	3	11. 40. 3	6. 6.51.11	3. 38. 46 N	+ 32	+ 11
	4	12. 30. 20	6. 20.43.38	4. 23. 57 N	+ 56	— 11
	5	13. 20 11	7. 4.54.24	4. 53. 19 N	+ 30	+ 5
	6	14. 12. 12	7. 19.20.22	5. 4. 54 N	+ 11	+ 13
	12	19. 53. 45	10. 17.27.50	0. 16. 28 N	— 34	— 4
	26	6. 26. 33	4. 9.36. 6	0. 50. 44 S	— 18	— 28
	27	7. 12. 51	4. 21.56.46	0. 14. 47 N	— 27	+ 19
	28	7. 58. 41	5. 4.30.40	1. 20. 26 N	— 27	+ 25
	29	8. 44. 29	5. 17.23.22	2. 23. 40 N	— 25	+ 17
	30	9. 30. 46	6. 0.39.18	3. 20. 57 N	— 19	+ 9
May	1	10. 18. 12½	6. 14.21.25	4. 8. 28 N	0	+ 9
	3	12. 0. 27	7. 13. 4.47	4. 59. 20 N	+ 33	— 5
	6	14. 53. 24½	8. 28.16.57	3. 50. 7 N	+ 9	— 17
	8	16. 53. 2	9. 28.23. 8	1. 40. 57 N	— 35	— 19
	10	18. 44. 44	10. 27.37.40	0. 51. 48 S	— 51	+ 5
	29	8. 55. 44	6. 21.39.17	4. 36. 54 N	— 30	— 5
June	1	11. 35. 40	8. 5.50.48	4. 45. 4 N	— 7	— 14
	2	12. 38. 6	8. 21.21.17	4. 6. 40 N	+ 11	— 26
	3	13. 40. 8	9. 6.57.44	3. 9. 32 N	+ 10	— 29
	23	5. 17. 27	5. 19.37. 7	3. 0. 35 N	— 12	+ 30
	24	6. 1. 46½	6. 2.24.23	3. 52. 36 N	— 1	+ 7
	25	6. 47. 8	6. 15.35.14	4. 33. 26 N	— 21	+ 13
	26	7. 34. 27	6. 29.14.10	5. 0. 56 N	— 30	+ 4
	27	8. 24. 38	7. 13.24.39	5. 11. 17 N	— 44	+ 3
July	2	13. 26. 32	10. 0.38.22	1. 11. 21 N	+ 6	— 33
	5	16. 18. 26	11. 16.27.18	2. 49. 55 S	— 16	+ 12
	7	17. 57. 18	0. 14.48.59	4. 35. 11 S	— 8	+ 3
	9	19. 30. 36	1. 11.34.46	5. 14. 16 S	— 22	— 13

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1757		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
July	12	21. 51. 41		A.R.	— 1	
	24	6. 15. 50½	7. 7.29. 5	5. 15. 21 N	— 11	+ 10
	28	9. 59. 43	9. 6.31.59	3. 11. 24 N	— 70	— 19
	30	12. 5. 25	10. 8. 8.37	0. 29. 45 N	— 44	— 21
	31	13. 8. 14	10. 23.55.55	0. 58. 0 S	+ 11	+ 3
Aug.	1	14. 5. 22	11. 9.26. 1	2. 19. 33 S	+ 23	+ 5
	2	14. 59. 9	11. 24.32. 0	3. 29. 15 S	+ 26	+ 3
	6	18. 13. 59	1. 20.10.36	5. 15. 50 S	— 1	+ 2
	7	19. 1. 16	2. 3. 3.14	4. 59. 53 S	+ 10	— 14
	25	8. 44. 22½	9. 14.41.52:	2. 33. 29 N	— 68::	— 75::
	28	11. 45. 13	11. 1.19.15	1. 36. 52 S	— 53	— 19
	29	12. 43. 34	11. 16.47.45	2. 53. 40 S	— 6	+ 6
	30	13. 36. 55	0. 1.57. 8	3. 56. 15 S	+ 13	+ 7
	31	14. 28. 8	0. 16.42. 3	4. 41. 16 S	+ 22	+ 4
Sept.	1	15. 17. 50	1. 0.58.34	5. 7. 9 S	+ 29	+ 2
	3	16. 55. 10	11. 28. 5.49:	5. 3. 44 S	+ 28:	— 2
	18	3. 48. 13½	7. 26. 9.48	5. 0.29: N	+ 2	+ 22:
	19	4. 40. 53	8. 10.10.51	4. 34. 0: N	+ 5	+ 18:
	20	5. 36. 20	8. 24.27.51	3. 50. 2 N	+ 16	+ 21
	23	8. 32. 9	10. 8.49.55	0. 20. 2 N	— 41	— 13
	26	11. 19. 50½	11. 24.19.38	3. 25. 14 S	— 63	+ 26
	30	14. 44. 54	1. 22. 3.13	5. 1. 8 S	+ 4	+ 7
Oct.	2	16. 24. 8½	2. 18.26.50	4. 5. 17 S	+ 29	+ 11
	3	17. 13. 31	3. 1. 6.18	3. 19. 10 S	+ 27	+ 1
	18	4. 29. 19	9. 4.37.57:	2. 56. 41:: N	+ 6:	— 14::
	19	5. 27. 29	9. 19.11.38	1. 48. 48 N	— 7	— 9
	20	6. 25. 26	10. 3.50. 0	0. 33. 40 N	— 9	— 20
	23	9. 9. 50	11. 17.59.14	3. 5. 38 S	— 60	+ 28
	24	10. 1. 9	0. 2.39. 4	3. 59. 45 S	— 78	+ 25
	25	10. 51. 25	0. 17.10.58	4. 37. 36 S	— 78	+ 25
	28	13. 23. 18	1. 29.15.51	4. 42. 18 S	— 30	+ 16
	30	15. 3. 9	2. 25.35.30	3. 26. 43 S	— 16	+ 10
	31	15. 53. 56	3. 8.15.27	2. 33. 28 S	+ 29	0
Nov.	1	16. 42. 59	3. 20.40.18	1. 33. 34 S	+ 31	+ 4
	3	18. 17. 20	4. 15. 5.23	0. 34. 22 N	+ 31	+ 5

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1757		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Nov.	5	19. 47. 2	5. 9.38.21	2. 36. 25 N	+ 22	+ 22
	7	21. 15. 30	6. 5. 5.40	4. 12. 0 N	+ 45	+ 41:
	16	4. 21. 1	9. 29.25.53	0. 41. 0 N	— 36	— 7
	17	5. 18. 29½	10. 14 10.22	0. 37. 6 S	— 49	+ 14
	20	7. 56. 37	11. 27.39.38	3. 54. 34 S	— 52	+ 31
	21	8. 45. 45	0. 11.53. 2	4. 34. 40 S	— 56	+ 23
	23	10. 22. 51	1. 9.49.22	5. 2. 21 S	— 66	+ 25
	24	11. 11. 58	1. 23.28.36	4. 49. 53 S	— 67	+ 20
	26	12. 54. 24	2. 20. 1.51	3. 39. 23 S	— 45	+ 9
	27	13. 44. 53	3. 2.53.10	2. 46. 45 S	— 27	+ 5
Dec.	4	19. 7. 57	5. 29.16.32	4. 8. 3 N	+ 22	0
	5	19. 51. 57	6, 12. 8.15	4. 42. 29 N	+ 22	0
	17	5. 54. 43	11. 23,22.53	3. 52. 55 S	— 59	+ 12
	18	6. 44. 7	0. 7.38.15	4. 36. 39 S	— 47	+ 11
	23	10. 45. 40½	2. 15. 7.54	3. 57. 28 S	— 35	+ 6
	27	14. 5. 19	4. 5.23.30	0. 5. 26 S	— 11	+ 4
1758 Jan.	2	18. 29. 14	6. 19.26, 0	5. 5. 10 N	+ 15	— 2
	13	3. 47. 56	11. 17.53.29	3. 38. 59 S	— 43	+ 2
	15	5. 29. 32	0. 17. 8.38	5. 3. 23 S	— 51	— 2
	16	6. 17. 55	1. 1, 8.29	5. 17. 10 S	— 41	— 10
	19	8. 42. 35	2. 11. 1.27	4. 15. 3 S	— 3	— 13
	26	14. 17. 40	5. 7.39.42	2. 55. 9: N	0	— 1:
	30	17. 8. 59½	6. 27.24.58	5. 15. 40 N	+ 12	— 20
Feb.	1	18. 42. 53	7. 23.57.10:	4. 59. 10 N	+ 9:	— 10
	11	3. 20. 14	0. 10.55.44	4. 50. 36 S	— 8	— 21
	13	5. 0. 46	1. 9.50.36	5. 14. 20 S	— 25	— 8
	15	6. 39. 16	2. 6.50.10	4. 26. 2 S	— 18	— 10
	16	7. 28. 40	2. 19.44.48:	3. 41. 18:: S	— 1:	— 13::
	17	8. 18. 9	3. 2.22.30	2. 46. 42 S	— 2	— 12
	18	9. 7. 21	3. 14.47.23	1. 45. 11 S	— 5	— 16
	20	10. 43. 8	4. 9.15.30	0. 27. 31 N	+ 5	+ 12
	27	15. 51. 34	7. 6. 7. 8	5. 11. 20 N	+ 8	— 15
Mar.	1	17. 27. 21	8. 2.38.31	4. 32. 43 N	+ 9	— 21
	3	19. 16. 4	9. 0.39.50	2. 49. 50 N	— 1	— 23
	15	5. 22. 13	2. 14.53.57	3. 49. 24 S	— 12	— 6

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1758		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Mar.	16	6. 12. 49	2. 27.52.17	2. 57. 18 S	— 4	— 9
	17	7. 2. 52	3. 10.30.21	1. 57. 56 S	— 23	— 19
	23	11. 37. 49	5. 24, 0.38	3. 58. 8 N	+ 30	— 1
	24	12. 22. 36	6. 6.31.23	4. 33. 54 N	+ 65	— 32
				A.R.	+ 46	
	26	13. 49. 59	7. 2. 5.17	5. 3. 14 N	+ 45	— 9
	28	15. 24. 24	7. 28.30. 9	4. 31. 5 N	+ 7	— 10
	29	16. 15. 37	8. 12. 4.23	3. 51. 30 N	0	— 15
	30	17. 9. 42	8. 25.55. 0	2. 57. 33 N	+ 1	— 17
	31	18. 6. 12	9. 10. 3.30:	1.51.33:: N	— 1:	— 11::
Apr.	13	4. 54. 47	3. 5.22.51	2. 8. 0 S	— 6	— 21
	14	5. 45. 22	3. 18. 4.31	1. 4. 19 S	— 11	— 19
	16	7. 21. 39½	4. 12.44.11	1. 5. 39 N	— 11	+ 10
	19	9. 34. 25	5. 19.23.25	3. 48. 48 N	— 3	+ 12
	20	10. 17. 9½	6. 1.51. 4	4. 25. 45 N	+ 16	+ 12
	22	11. 44. 20	6. 27.27.36	4. 59. 50 N	+ 41	+ 9
May	1	19. 48. 15	11. 3.56.52	2.55. 38:: S	— 45	+ 5::
	2	20. 41. 27½	11. 18.49.40	3. 52. 47 S	— 57	+ 18
	10	2. 43. 35	2. 29.31.38	2. 22. 57 S	— 9	— 31
	11	3. 35. 44	3. 12.35.19	1. 18. 5 S	— 2	— 14
	12	4. 26. 24	3. 25.18.25	0. 11. 20: S	+ 6	— 30:
	13	5. 15. 7	4. 7.45.37	0. 54. 52 N	— 6	+ 32
	14	6. 1. 44	4. 20. 1.53	1. 57. 44 N	— 10	+ 25
	16	7. 29. 47	5. 14.26.21	3. 43. 57 N	— 23	+ 19
	17	8. 12. 22	5. 26.46.20	4. 23. 5 N	— 23	+ 18
	18	8. 54. 57½	6. 9.18.29	4. 50. 24 N	— 14	+ 12
	19	9. 38. 24	6. 22. 6.54	5. 3. 48 N	— 6	+ 7
	23	12. 58. 5	8. 16.36.23::	3. 16. 29 N	+ 8::	— 15
	26	15. 52. 8	10. 0. 6.31	0. 20. 28 S	— 39	+ 22
	28	17. 44. 59	10. 29.30.55	2. 49. 25 S	— 60	+ 15
June	9	3. 7. 19	4. 2.34.14	0. 37. 31 N	— 7	+ 41
				A.R.	+ 2	
	10	3. 55. 15	4. 14.59.52	1. 43.35: N	— 4	+ 35:
				A.R.	+ 6	
	13	6. 7. 25	5. 21.40.39	4. 19. 36 N	— 11	+ 21
	14	6. 49. 29	6. 4. 0.48	4. 50.48:: N	— 18	+ 28::
				A.R.	— 2	

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1758		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
				A.R.	— 2	
June	17	9. 1. 35	7. 12. 36. 19	4. 59. 25 N	— 27	+ 1
	18	9. 50. 38	7. 26. 13. 5	4. 29. 22 N	— 29	+ 1
	19	10. 43. 21	8. 10. 15. 5	3. 42. 40 N	— 17	— 14
	20	11. 39. 43½	8. 24. 40. 57	2. 40. 36 N	— 26	— 23
	22	13. 41. 55	9. 24. 26. 37	0. 4. 54 N	— 15	— 30
	23	14. 41. 49	10. 9. 32. 15	1. 17. 31 S	— 26	+ 29
	26	17. 26. 56	11. 24. 27. 33	4. 30. 55 S	— 49	+ 21
	28	19. 6. 40	0. 23. 30. 4	5. 15. 33 S	— 27	+ 1
July	16	8. 29. 46½	8. 3. 31. 2:	4. 9. 31 S	— 60:	0
	17	9. 23. 46	8. 17. 36. 20	3. 15. 2: N	— 47	— 55:
				A.R.	— 56	
	19	11. 22. 16	9. 17. 11. 30	0. 44. 42 N	— 44	— 21
	24	16. 12. 51	0. 4. 7. 15	4. 55. 58 S	— 6	+ 10
	25	17. 3. 38	0. 18. 55. 56	5. 15. 22 S	— 11	— 3
	26	17. 53. 29	1. 3. 22. 36	5. 13. 59 S	— 16	— 3
	29	20. 24. 11	2. 14. 34. 19	3. 27. 13 S	+ 23	— 32
Aug.	11	5. 32. 31	7. 14. 28. 14:	4. 56. 35 N	+ 30:	+ 7
	12	6. 19. 41	7. 27. 33. 2	4. 25. 15 N	+ 20	+ 5
	17	11. 5. 12	10. 10. 0. 15	1. 20. 45 S	— 56	+ 28
	18	12. 6. 40	10. 25. 44. 33	2. 39. 59 S	— 21	+ 21
	20	14. 1. 26	11. 27. 20. 24	4. 36. 46 S	+ 22	+ 8
	21	14. 54. 50½	0. 12. 49. 50	5. 5. 5 S	+ 20	— 1
	22	15. 46. 49	0. 27. 55. 47	5. 11. 18 S	+ 9	— 7
	23	16. 38. 6½	1. 12. 33. 46	4. 56. 42 S	— 1	— 3
Sept.	9	5. 2. 57	8. 5. 52. 46	3. 47. 33: N	+ 39	+ 6:
	10	5. 54. 26	8. 19. 16. 11	2. 53. 33: N	+ 43	+ 6:
	12	7. 47. 2	9. 17. 24. 5::	0. 33. 34 N	— 20::	— 8
	15	10. 44. 39	11. 3. 7. 11	3. 14. 18 S	+ 64	+ 16
	16	11. 41. 37	11. 18. 58. 52	4. 11. 2 S	— 50	+ 12
	17	12. 39. 14	0. 4. 53. 16	4. 48. 26 S	— 18	+ 5
	18	13. 33. 14	0. 20. 35. 23	5. 3. 27 S	0	— 3
	19	14. 26. 32½	1. 5. 55. 50	4. 56. 4 S	+ 14	— 4
	20	15. 19. 40	1. 20. 27. 43	4. 28. 45 S	+ 6	— 11
	21	16. 12. 51	2. 5. 7. 28	3. 45. 8 S	+ 2	— 12
	23	17. 58. 47	3. 2. 14. 49	1. 46. 44 S	+ 6	— 10

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1758		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Sept.	25	19. 40. 45	3. 27. 46. 31	0. 26. 48 N	+ 16	+ 15
	26	20. 29. 0	4. 10. 9. 31	1. 31. 26 N	+ 45	+ 1
Oct.	9	5. 37. 53	9. 12. 2. 41	0. 47. 1 N	+ 29	— 3
	10	6. 34. 48	9. 26. 10. 15	0. 27. 25 S	+ 12	+ 9
	11	7. 32. 14	10. 10. 42. 16	1. 42. 10 S	— 5	+ 13
	12	8. 29. 14	10. 25. 39. 31	2. 52. 0 S	— 56	+ 15
	13	9. 25. 9	11. 10. 57. 53	3. 51. 9 S	— 63	+ 15
	14	10. 19. 57	11. 26. 32. 27	3. 34. 12 S	— 77	+ 17
	15	11. 13. 58	0. 12. 13. 46	4. 56. 55 S	— 69	+ 20
	16	12. 10. 2	0. 27. 52. 9	4. 57. 35 S	— 45	+ 5
	17	13. 4. 4½	1. 13. 14. 6	4. 36. 23 S	— 28	+ 2
	19	14. 53. 37	2. 12. 40. 0	3. 2. 19 S	— 8	— 2
	21	16. 42. 22½	3. 10. 2. 40	0. 50. 55 S	+ 7	— 10
	26	20. 40. 6	5. 12. 28. 26	4. 1. 14:: N	+ 34	+ 3::
Nov.	5	3. 33. 47	9. 7. 52. 34	0. 53. 51:: N	— 13	+ 12::
	8	6. 21. 41	10. 20. 15. 4	2. 42. 57 S	— 14	+ 7
	9	7. 16. 0	11. 4. 55. 9	4. 43. 2 S	— 24	+ 8
	12	9. 53. 24	0. 20. 12. 35	5. 4. 15 S	— 55	+ 19
	13	10. 46. 5	1. 5. 26. 22	4. 50. 0 S	— 60	+ 21
	15	12. 37. 15	2. 5. 20. 11	3. 24. 37 S	— 35	+ 9
	16	13. 33. 7	2. 19. 44. 40	2. 21. 25 S	— 21	+ 10
	20	17. 5. 10½	4. 13. 0. 27	2. 15. 18 N	+ 21	— 2
	21	17. 51. 50	4. 25. 27. 6	3. 11. 54 N	+ 17	+ 8
	22	18. 36. 3	5. 7. 43. 5	3. 59. 10 N	+ 27	— 2
	23	19. 18. 29½	5. 19. 54. 41	4. 35. 7 N	+ 24	0
	24	19. 59. 58	6. 2. 7. 33	4. 58. 41 N	+ 26	— 5
Dec.	7	6. 5. 10	11. 15. 3. 46	4. 27. 34 S	— 37	+ 10
	8	6. 56. 11	11. 29. 45. 21	4. 59. 57 S	— 28	+ 14
	13	11. 16. 8	2. 12. 55. 40	2. 51. 50 S	— 35	+ 5
	16	14. 3. 43	3. 24. 14. 11	0. 45. 18 N	— 7	0
	18	15. 44. 4	4. 20. 2. 5	2. 56. 58 N	+ 24	+ 1
1759						
Jan.	2	3. 7. 29	10. 25. 38. 25	3. 22. 38 S	— 53	+ 11
	3	4. 1. 48	11. 10. 31. 11	4. 18. 28 S	— 54	+ 11
	6	6. 34. 3	0. 24. 42. 33	5. 13. 30 S	— 21	+ 3
	8	8. 15. 11	1. 23. 26. 33	4. 12. 7 S	+ 10	— 13

	Dys, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1759		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Jan.	12	11. 50. 34	3. 18.29.52	0. 13. 43 N	— 11	+ 18
	13	12. 45. 27	4. 1.40.23	1. 25. 42 N	— 12	+ 10
	14	13. 35. 35	4. 14.34.28	2. 31. 50 N	— 10	+ 5
	16	15. 7. 38	5. 9.41.12	4. 15. 18 N	+ 20	+ 3
	17	15. 50. 16	5. 21.59.13	4. 49. 13 N	+ 33	— 3
	18	16. 31. 35	6. 4.12. 6	5. 9. 44 N	+ 35	— 7
	19	17. 12. 28	6. 16.24.32	5. 16. 18 N	+ 27	— 16
	20	17. 53. 51	6. 28.41.39	5. 8. 25 N	+ 24	— 6
	21	18. 36. 42	7. 11. 9. 7	4. 45. 58 N	+ 20	— 8
	22	19. 22. 1	7. 23.52.41	4. 9. 30 N	+ 16	— 22
Feb.	3	5. 21. 16	1. 4.45.56	4. 56. 8 S	— 32	— 4
	7	8. 50. 50½	3. 0.35.55	1. 21. 44 S	0	— 28
	11	12. 16. 23	4. 2.25. 1	3. 6. 12 N	— 15	+ 14
Mar.	5	5. 52. 54	2. 12.45.27	2. 38. 53 S	— 26	— 22
	6	6. 47. 3	2. 26.29.51	1. 32. 6 S	— 30	— 19
	7	7. 40. 50	3. 9.51.16	0. 22. 15 S	— 26	— 25
	9	9. 24. 7	4. 5.40.45	1. 52. 34 N	— 4	+ 26
	10	10. 12. 27	4. 18.16.29	2. 51. 24 N	— 20	— 18
	11	10. 58. 22	5. 0.43.16	3. 41. 10 N	— 18	+ 13
	12	11. 42. 7	5. 13. 3.45	4. 19. 57 N	— 24	+ 8
	13	12. 26. 15½	5. 25.20.37	4. 46. 29 N	+ 2	— 2
	16	14. 29. 31	7. 2. 0.54	4. 44. 23 N	+ 19	— 19
	17	15. 12. 7	7. 14.19.10	4. 16. 39 N	+ 17	— 20
Apr.	2	4. 38. 51	2. 21.20.50	1. 42. 24 S	— 3	— 18
	5	7. 20. 58	4. 1.37.10	1. 46. 3 N	— 24	+ 18
	7	8. 56. 53	4. 26.47.23	3. 36. 16 N	— 31	+ 3
	10	11. 4. 32	6. 3.33.24	4. 57. 29 N	— 5	+ 5
	12	12. 28. 26	6. 28. 2.22	4. 45. 24 N	— 1	— 13
	13	13. 10. 42	7. 10.21.59	4. 18. 57 N	+ 23	— 16
	14	13. 54. 45	7. 22.47.33	3. 39. 59 N	+ 11	— 22
	15	14. 41. 9	8. 5.21.18	2. 49. 41 N	— 28	— 18
	17	16. 21. 56½	9. 1. 5.26	0. 43. 47 N	— 21	— 14
	18	17. 15. 48	9. 14.22.41	0. 26. 40 S	— 25	+ 8
	30	13. 21. 52	2. 29. 5. 8	0. 49. 41 S	— 4	— 25

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1759		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
May	1	4. 18. 54½	3. 13. 6.36	0. 25. 8 N	+ 3	+ 28
	2	5. 13. 40	3. 26.37.46	1. 36. 6 N	— 3	+ 24
	3	6. 5. 19	4. 9.43. 0	2. 39. 36 N	— 21	+ 22
	6	8. 21. 59	5. 17.12.39	4. 45. 52 N	— 25	+ 8
	8	9. 44. 6	6. 11.37.20	5. 5. 24 N	— 14	+ 6
	9	10. 24. 58	6. 23.51.52	4. 54. 27 N	— 6	0
	10	11. 6. 47	7. 6.11.51	4. 29. 39 N	— 19	— 4
	15	15. 11. 57	9. 10.18.13	0. 15. 56 S	— 42	+ 7
	17	17. 1. 31	10. 7.32.29	2. 36. 33 S	— 58	+ 2
	18	17. 55. 36	10. 21.36.32	3. 37. 13 S	— 66	0
June	2	6. 18. 26	5. 12.32.27	4. 45. 49 N	— 1	+ 22
	4	7. 41. 38	6. 7. 5.50	5. 13. 58 N	— 20	+ 12
	6	9. 3. 34	7. 1.35.52	4. 45. 31 N	— 17	— 14
	7	9. 46. 22½	7. 14. 0.52	4. 10. 44 N	— 13	— 2
	8	10. 31. 30	7. 26.36.54	3. 23. 20 N	— 4	— 6
	9	11. 19. 29	8. 9.26.31	2. 24. 50 N	— 8	— 6
	14	15. 52. 16½	10. 17.21.11	3. 26. 5 S	— 72	+ 14
	17	18. 27. 22	0. 0.43.26	5. 14. 43 S	— 60	+ 10
July	4	7. 41. 5	7. 8.57.59	4. 28. 15 N	— 12	+ 9
	5	8. 24. 57	7. 21.25.49	3. 45. 30 N	— 13	+ 9
	6	9. 11. 35	8. 4. 7.46	2. 51. 6 N	— 13	+ 6
	7	10. 1. 27½	8. 17. 7.28	1. 46. 45 N	— 23	— 2
	8	10. 54. 33	9. 0.27. 8	0. 35. 5 N	— 19	— 10
	9	11. 51. 19	9. 14. 8. 3	0. 40. 24 S	— 24	+ 17
	10	12. 49. 18½	9. 28. 8.31	1. 55. 16 S	— 28	+ 16
	11	13. 45. 47	10. 12.25.13	3. 4. 16 S	— 38	+ 23
	12	14. 40. 46	10. 26.55.16	4. 2. 39 S	— 59	+ 19
	13	15. 33. 45	11. 11.34.20	4. 45. 42 S	— 60	+ 21
	14	16. 24. 57	11. 26.18.30	5. 10. 16 S	— 64	+ 23
	15	17. 15. 3	0. 11. 4.14	5. 14. 32 S	— 47	+ 16
	17	18. 55. 54	1. 10.30.13	4. 22. 18 S	— 43	+ 2
	18	19. 48. 24	1. 25. 5.44	3. 30. 0 S	— 20	— 22
	19	20. 42. 59	2. 9.34.12	2. 14. 16 S	— 13	— 18
	20	21. 39. 23	2. 23.53.19	1. 10. 22 S	— 13	— 26
	31	5. 35. 47	7. 3.53.33	4. 36. 57 N	+ 30	+ 14

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1759		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Aug.	1	6. 18. 22	7. 16.10.44	4. 0. 1 N	+ 18	+ 3
	3	7. 51. 6	8. 11.20.55	2. 12. 10 N	— 11	— 4
	5	9. 36. 42½	9. 7.52.16	0. 8. 5 S	— 19	+ 14
	7	11. 30. 51	10. 6. 6. 3	2. 34. 18 S	— 29	+ 22
	8	12. 30. 5	10. 20.48.55	3. 37. 25 S	— 11	+ 21
	9	13. 25. 19	11. 5.47.13	4. 26. 50 S	— 17	+ 18
	10	14. 18. 40	11. 20.54.50	4. 57. 57 S	— 18	+ 26
	13	16. 52. 50	1. 6. 3.56	4. 26. 55 S	— 51	+ 3
	15	18. 38. 47	2. 5.11.57	2. 37. 20 S	— 32	— 1
	17	20. 30. 8	3. 3.20.49	0. 13. 39 S	— 20	— 40
	26	2. 50. 53½	6. 16.56.19	4. 57. 27 N	+ 21	+ 18
	28	4. 13. 24	7. 11.19. 7	4. 4. 41 N	+ 41	0
	30	5. 42. 38	8. 5.57.57	2. 26. 21 N	+ 32	— 3
	31	6. 31. 28	8. 18.37.29	1. 24. 2 N	+ 23	— 7
Sept.	3	9. 14. 43	9. 29. 2.16::	2. 6. 2 S	— 26::	+ 15
	4	10. 11. 46	10. 13.29.59	3. 11. 0 S	— 49	+ 14
	5	11. 8. 11	10. 28.25.55	4. 5. 1 S	— 45	+ 13
	6	12. 4. 28½	11. 13.45.10	4. 43. 0 S	— 28	+ 8
	9	14. 45. 20	1. 0.24.21	4. 29. 49 S	— 17	+ 1
	10	15. 38. 53	1. 15.38.45	3. 44. 42 S	— 28	— 6
	11	16. 33. 34	2. 0.32.37	2. 45. 0 S	— 41	— 6
	12	17. 29. 26	2. 15. 3.22	1. 35. 59 S	— 43	— 10
	13	18. 25. 55	2. 29.11. 6	0. 22. 46 S	— 43	— 14
	15	20. 16. 35	3. 26.24.26	1. 58. 12 N	— 24	+ 5
	16	21. 8. 38½	4. 9.34.57		— 14	
	29	6. 6. 44½	9. 9.16.46	0. 40. 8 S	+ 19	+ 9
	30	7. 1. 2	9. 22.37. 1	1. 48. 17 S	+ 4	+ 10
Oct.	2	8. 51. 48	10. 20.48.39	3. 48. 39 S	— 43	+ 12
	4	10. 40. 46½	11. 21. 5. 8	4. 55. 58 S	— 66	+ 14
	5	11. 34. 27½	0. 6.48.10	4. 59. 8 S	— 61	+ 12
	6	12. 30. 39	0. 22.42.12	4. 39. 32 S	— 29	+ 2
	7	13. 25. 27½	1. 8.32.17	3. 58. 21 S	— 22	0
	8	14. 21. 40½	1. 24. 8.10	2. 59. 47 S	— 18	0
	12	18. 12. 17	3. 22.10. 6	1. 52. 28 N	— 45	+ 4
	13	19. 5. 46½	4. 5.32.50	2. 54. 47 N	— 30	+ 7
	14	19. 55. 55	4. 18.34.42	3. 46. 16 N	— 17	+ 2
	28	5. 46. 51	10. 0.53.17	2. 42. 54 S	— 18	+ 3

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1759		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
May	1	4. 18. 54½	3. 13. 6.36	0. 25. 8 N	+ 3	+ 28
	2	5. 13. 40	3. 26.37.46	1. 36. 6 N	— 3	+ 24
	3	6. 5. 19	4. 9.43. 0	2. 39. 36 N	— 21	+ 22
	6	8. 21. 59	5. 17.12.39	4. 45. 52 N	— 25	+ 8
	8	9. 44. 6	6. 11.37.20	5. 5. 24 N	— 14	+ 6
	9	10. 24. 58	6. 23.51.52	4. 54. 27 N	— 6	0
	10	11. 6. 47	7. 6.11.51	4. 29. 39 N	— 19	— 4
	15	15. 11. 57	9. 10.18.13	0. 15. 56 S	— 42	+ 7
	17	17. 1. 31	10. 7.32.29	2. 36. 33 S	— 58	+ 2
	18	17. 55. 36	10. 21.36.32	3. 37. 13 S	— 66	0
June	2	6. 18. 26	5. 12.32.27	4. 45. 49 N	— 1	+ 22
	4	7. 41. 38	6. 7. 5.50	5. 13. 58 N	— 20	+ 12
	6	9. 3. 34	7. 1.35.52	4. 45. 31 N	— 17	— 14
	7	9. 46. 22½	7. 14. 0.52	4. 10. 44 N	— 13	— 2
	8	10. 31. 30	7. 26.36.54	3. 23. 20 N	— 4	— 6
	9	11. 19. 29	8. 9.26.31	2. 24. 50 N	— 8	— 6
	14	15. 52. 16½	10. 17.21.11	3. 26. 5 S	— 72	+ 14
	17	18. 27. 22	0. 0.43.26	5. 14. 43 S	— 60	+ 10
July	4	7. 41. 5	7. 8.57.59	4. 28. 15 N	— 12	+ 9
	5	8. 24. 57	7. 21.25.49	3. 45. 30 N	— 13	+ 9
	6	9. 11. 35	8. 4. 7.46	2. 51. 6 N	— 13	+ 6
	7	10. 1. 27½	8. 17. 7.28	1. 46. 45 N	— 23	— 2
	8	10. 54. 33	9. 0.27. 8	0. 35. 5 N	— 19	— 10
	9	11. 51. 19	9. 14. 8. 3	0. 40. 24 S	— 24	+ 17
	10	12. 49. 18½	9. 28. 8.31	1. 55. 16 S	— 28	+ 16
	11	13. 45. 47	10. 12.25.13	3. 4. 16 S	— 38	+ 23
	12	14. 40. 46	10. 26.55.16	4. 2. 39 S	— 59	+ 19
	13	15. 33. 45	11. 11.34.20	4. 45. 42 S	— 60	+ 21
	14	16. 24. 57	11. 26.18.30	5. 10. 16 S	— 64	+ 23
	15	17. 15. 3	0. 11. 4.14	5. 14. 32 S	— 47	+ 16
	17	18. 55. 54	1. 10.30.13	4. 22. 18 S	— 43	+ 2
	18	19. 48. 24	1. 25. 5.44	3. 30. 0 S	— 20	— 22
	19	20. 42. 59	2. 9.34.12	2. 14. 16 S	— 13	— 18
	20	21. 39. 23	2. 23.53.19	1. 10. 22 S	— 13	— 26
	31	5. 35. 47	7. 3.53.33	4. 36. 57 N	+ 30	+ 14

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1759		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Aug.	1	6. 18. 22	7. 16.10.44	4. 0. 1 N	+ 18	+ 3
	3	7. 51. 6	8. 11.20.55	2. 12. 10 N	— 11	— 4
	5	9. 36. 42½	9. 7.52.16	0. 8. 5 S	— 19	+ 14
	7	11. 30. 51	10. 6. 6. 3	2. 34. 18 S	— 29	+ 22
	8	12. 30. 5	10. 20.48.55	3. 37. 25 S	— 11	+ 21
	9	13. 25. 19	11. 5.47.13	4. 26. 50 S	— 17	+ 18
	10	14. 18. 40	11. 20.54.50	4. 57. 57 S	— 18	+ 26
	13	16. 52. 50	1. 6. 3.56	4. 26. 55 S	— 51	+ 3
	15	18. 38. 47	2. 5.11.57	2. 37. 20 S	— 32	— 1
	17	20. 30. 8	3. 3.20.49	0. 13. 39 S	— 20	— 40
	26	2. 50. 53½	6. 16.56.19	4. 57. 27 N	+ 21	+ 18
	28	4. 13. 24	7. 11.19. 7	4. 4. 41 N	+ 41	0
	30	5. 42. 38	8. 5.57.57	2. 26. 21 N	+ 32	— 3
	31	6. 31. 28	8. 18.37.29	1. 24. 2 N	+ 23	— 7
Sept.	3	9. 14. 43	9. 29. 2.16::	2. 6. 2 S	— 26::	+ 15
	4	10. 11. 46	10. 13.29.59	3. 11. 0 S	— 49	+ 14
	5	11. 8. 11	10. 28.25.55	4. 5. 1 S	— 45	+ 13
	6	12. 4. 28½	11. 13.45.10	4. 43. 0 S	— 28	+ 8
	9	14. 45. 20	1. 0.24.21	4. 29. 49 S	— 17	+ 1
	10	15. 38. 53	1. 15.38.45	3. 44. 42 S	— 28	— 6
	11	16. 33. 34	2. 0.32.37	2. 45. 0 S	— 41	— 6
	12	17. 29. 26	2. 15. 3.22	1. 35. 59 S	— 43	— 10
	13	18. 25. 55	2. 29.11. 6	0. 22. 46 S	— 43	— 14
	15	20. 16. 35	3. 26.24.26	1. 58. 12 N	— 24	+ 5
	16	21. 8. 38½	4. 9.34.57		— 14	
	29	6. 6. 44½	9. 9.16.46	0. 40. 8 S	+ 19	+ 9
	30	7. 1. 2	9. 22.37. 1	1. 48. 17 S	+ 4	+ 10
Oct.	2	8. 51. 48	10. 20.48.39	3. 48. 39 S	— 43	+ 12
	4	10. 40. 46½	11. 21. 5. 8	4. 55. 58 S	— 66	+ 14
	5	11. 34. 27½	0. 6.48.10	4. 59. 8 S	— 61	+ 12
	6	12. 30. 39	0. 22.42.12	4. 39. 32 S	— 29	+ 2
	7	13. 25. 27½	1. 8.32.17	3. 58. 21 S	— 22	0
	8	14. 21. 40½	1. 24. 8.10	2. 59. 47 S	— 18	0
	12	18. 12. 17	3. 22.10. 6	1. 52. 28 N	— 45	+ 4
	13	19. 5. 46½	4. 5.32.50	2. 54. 47 N	— 30	+ 7
	14	19. 55. 55	4. 18.34.42	3. 46. 16 N	— 17	+ 2
	28	5. 46. 51	10. 0.53.17	2. 42. 54 S	— 18	+ 3

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1759		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Nov.	1	9. 18. 14	11. 28.30.34	5. 7. 13 S	— 69	+ 2
	2	10. 10. 51	0. 14. 3.48	4. 56. 18 S	— 80	+ 6
	3	11. 4. 43	0. 29.52.29	4. 22. 44 S	— 46	+ 11
	5	13. 1. 14	2. 1.34.39	2. 19. 16 S	— 34	— 3
	6	14. 1. 25	2. 17. 2.32	1. 0. 23 S	— 26	+ 2
	13	20. 8. 20	5. 22.15.37	5. 9. 30 N	+ 8	— 20
	14	20. 49. 25	6. 4.33.51	5. 9. 15 N	+ 22	— 24
	15	21. 29. 46		A.R.	+ 28	
	27	6. 18. 15½	11. 7.36.28	4. 56. 7 S	— 28	— 6
	28	7. 8. 24	11. 22. 0.12	5. 13. 39 S	— 30	— 3
	29	7. 58. 32	0. 6.47.59	5. 11. 12 S	— 39	+ 3
	30	8. 49. 36½	0. 21.57.24	4. 47. 19 S	— 37	+ 5
Dec.	2	10. 38. 35	1. 23. 0.33	2. 59. 13 S	— 58	+ 9
	3	11. 37. 34	2. 8.36.51	1. 42. 25 S	— 49	+ 17
	7	15. 40. 10	4. 7.58.12	3. 26. 4 N	— 8	+ 3
	8	16. 32. 27	4. 21.36.48	4. 17. 4 N	— 58	— 8
	10	18. 5. 3	5. 17.35.30	5. 12. 28 N	+ 15	— 5
	11	18. 47. 9	6. 0. 5.45	5. 17. 4 N	+ 18	— 16
	12	19. 27. 53	6. 12.23.50	5. 6. 49 N	+ 19	— 9
	14	20. 49. 20	7. 6.45.21	4. 6. 13 N	+ 19	— 19
	15	21. 31. 57	7. 18.58.23	3. 17. 54 N	+ 16	+ 2
	26	5. 53. 53	0. 1.41.37	5. 16. 13 S	— 28	+ 3
	27	6. 42. 46	0. 16.15. 8	5. 0. 17 S	— 17	+ 3
	28	7. 32. 52½	1. 1. 2.12	4. 24. 30 S	— 8	— 3
	31	10. 19. 32	2. 16.16.23	1. 2. 0 S	— 17	— 7
1760 Jan.	1	11. 20. 30	3. 1.20.54	0. 21. 9 N	— 26	+ 4
	2	12. 24. 13	3. 16.14.16	1. 41. 42 N	— 7	+ 10
	3	13. 23. 28	4. 0.47. 6	2. 53. 46 N	0	+ 3
	8	17. 23. 28	6. 7.22.16	5. 10. 37 S	+ 38	— 4
	22	3. 51. 49	11. 27.22.38	5. 11. 8 S	— 40	+ 14
	25	6. 20. 18	1. 11. 6.20	3. 43. 11 S	— 17	+ 6
	26	7. 13. 11	1. 25.46.14	2. 41. 8 S	— 8	— 7
	28	9. 7. 9	2. 25. 5.13	0. 9. 55 S	— 5	— 15
	29	10. 6. 48	3. 9.39. 5	1. 8. 28 N	— 19	+ 18
Feb.	2	13. 47. 39	5. 5.43.29	4. 47. 31 N	— 11	+ 14

	Days, N. S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1760		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
Feb.	6	16. 39. 49	6. 26.47.49	4. 24. 24 N	+ 31	— 3
	9	18. 49. 3	8. 3.25.54	1. 58. 18 N	+ 5	— 26
	20	3. 26. 2		A.R.	— 8	
	22	5. 9. 36	1. 21.24.32	2. 47. 37 S	— 23	+ 1
	24	7. 1. 16½	2. 20.30.58	0. 22. 52 S	— 21	— 16
	25	7. 59. 30	3. 4.49.29	0. 52. 46 N	— 14	+ 25
	27	9. 54. 3	4. 2.54. 3	3. 7. 2 N	— 26	+ 30
	28	10. 47. 33	4. 16.38. 1	3. 57. 49 N	— 31	+ 31
	29	11. 37. 40	5. 0. 8.16	4. 34. 16 N	— 39	+ 30
Mar.	1	12. 26. 40	5. 13.24.46	4. 55. 13 N	— 32	+ 17
	4	14. 34. 42½	6. 21.41.45	4. 25. 26 N	+ 7	— 1
	7	16. 42. 25	7. 28.25.23	2. 7. 14 N	- 5	— 26
	10	19. 8. 10		A.R.	— 20	
	21	3. 57. 56	2. 1. 7.30	1. 47. 14 S	— 9	0
	22	4. 55. 40	2. 15.59. 5	0. 30. 55 S	— 24	— 12
	27	9. 34. 9	4. 25.41.12	4. 31. 26 N	— 26	+ 26
	28	10. 21. 12	5. 8.49.32	4. 54. 8 N	— 39	+ 20
	29	11. 5. 34	5. 21.44.59	5. 1. 13 N	— 56	+ 18
	30	11. 48. 1½	6. 4.28.36	4. 53. 11 N	— 43	+ 8
	31	12. 31. 30	6. 17. 2.22	4. 30. 56 N	— 24	— 3
Apr.	2	13. 54. 41	7. 11.41.46	3. 10. 14 N	— 4	— 18
	3	14. 37. 57½	7. 23.52.56	2. 16. 0 N	0	— 27
	4	15. 23. 8½	8. 6. 2.52	1. 15. 12 N	— 17	— 27
	20	4. 45. 22	3. 9.49.41	1. 47. 47 N	— 18	+ 23
	22	6. 40. 22	4. 8. 7. 7	3. 52. 21 N	— 27	+ 20
	24	8. 20. 3	5. 4.50.13	4. 58. 57 N	— 17	+ 22
	26	9. 47. 19	6. 0.25.19½	5. 2. 57 N	— 29½	+ 6
	27	10. 28. 31	6. 12.54.59	4. 12. 38 N	— 18	+ 7
	29	11. 50. 45½	7. 7.32. 8	3. 24. 46 N	— 22	— 12
	30	12. 35. 29½	7. 19.44.55	2. 30. 54 N	— 23	— 23
May	23	7. 46. 44½	5. 26.24.35	5. 13. 4 N	— 2	+ 12½
	24	8. 28. 15	6. 8.57.58	4. 56. 3 N	0	+ 14
	27	10. 31. 52½	7. 15.45.11½	2. 50. 49 N	— 10½	— 5
	28	11. 15. 37	7. 27.55. 3	1. 50. 43 N	— 4	— 14
	31	13. 42. 23	9. 4.48.33	1. 30. 37 S	— 19	+ 1

	Days, N.S.	Mean Time of Tranſit of ☽'s Limb.	☽'s Longitude obſerved.	☽'s Latitude obſerved.	Error of Tab. in Long.	Error of Tab. in Lat.
1760		H. M. S.	S. D. M. S.	D. M. S.	S.	S.
June	2	15. 25. 26½	10. 0. 5.47½	3. 31. 54 S	− 50½	+ 11
	3	16. 16. 21	10. 13. 4. 6	4. 19. 30 S	− 52	+ 15
	18	4. 57. 49½	5. 8.26.54	5. 12. 23 N	+ 37	+ 24
	19	5. 43. 19½	5. 21.41.23	5. 16. 30 N	+ 30	+ 23
	21	7. 7. 26	6. 17. 4.55	4. 38. 4 N	+ 20	+ 14
	22	7. 48. 22	6. 29.24.33	3. 59. 14½ N	+ 30	+ 8½
	23	8. 29. 55	7. 11.36.36	3. 9. 56 N	+ 12	+ 5
	25	9. 58. 9	8. 5.57.12	1. 8. 11 N	+ 5	+ 3
	28	12. 29. 34	9. 13.15.19	2. 13. 5 S	− 7	+ 8
	29	13. 21. 42	9. 26. 2.12	3. 13. 5 S	− 10	+ 11
	30	14. 13. 19	10. 9. 1.58	4. 4. 3 S	− 31	+ 9
July	18	5. 3. 12½	6. 12. 7.27	4. 43. 24 N	+ 46	+ 27
	22	7. 53. 23	8. 1.25. 3	1. 27. 13 S	+ 13	+ 6
	23	8. 40. 6	8. 13.38.35	0. 21. 58 N	+ 14	0
	24	9. 29. 17	8. 26. 0.32	0. 44. 52 S	+ 19	+ 8
	27	12. 6. 39	10. 4.26.55	3. 45. 3 S	+ 4	+ 14
	29	13. 49. 21	11. 1.21.27	4. 55. 5 S	− 17	+ 13
Aug.	3	17. 50. 57	1. 12.13.48	2. 54. 28 S	− 4	+ 8
	4	18. 44. 12½	1. 26.53.59	1. 44. 41 S	− 38	+ 5
	21	8. 11. 36	9. 3.24.13	1. 32. 59 S	+ 1	+ 15
	23	9. 56. 14	9. 29. 1.49	3. 28. 32 S	− 3	+ 18
	27	13. 20. 47½	11. 24.10.50	4. 56. 37 S	− 12	+ 17
	28	14. 9. 4	0. 8.36.54	4. 34. 57 S	− 17	+ 9
	29	14. 57. 46	0. 23.11. 3½	3. 55. 41 S	− 19½	− 26
	31	16. 40. 25	1. 22.31. 8	1. 52. 13 S	− 45	− 5
Sept.	1	17. 35. 54	2. 7.12. 4	0. 37. 8 S	− 46	− 6
	17	6. 2. 30½	8. 28.11. 9	1. 21. 23 S	+ 14	+ 18
	20	8. 37. 18	10. 6.16.44	4. 4. 22 S	− 14	+ 21
	27	14. 34. 1	1. 17.23.37	2. 4. 16½ S	− 27	+ 1½
	29	16. 28. 40	2. 17.22.45½	0. 31. 47 N	− 52½	+ 6
Oct.	1	18. 29. 30	3. 16.40.32	2. 56. 46 N	− 48	+ 5
	18	7. 17. 36½	10. 13.29.37	4. 36. 56 S	− 10	+ 16
	20	8. 56. 33	11. 10.39 23	5. 9. 45 S	− 50	+ 17
	24	12. 20. 39½	1. 10.18.31	2. 33. 12 S	− 40	− 6
	25	13. 17. 7	1. 25.51.40	1. 14. 45 S	− 45	− 7
Nov.	2	20. 46. 1	5. 21.34. 5	5. 6. 40 N	+ 22	+ 28

ELEMENTS

OF THE

LUNAR TABLES

WITH WHICH

The foregoing Series of Obſervations was compared;

AND ALSO OF

MAYER's Firſt and Second Manuſcript TABLES;

And of another SET of TABLES.

ELEMENTS

OF THE

LUNAR TABLES, &c.

AFTER Mayer's firſt manuſcript tables were put into the hands of the late Dr. Bradley in the beginning of the year 1755, he compared them with a great number of his obſervations made with the new inſtruments ſince the year 1750, and thence made out a new and corrected ſet of tables which are thoſe that the foregoing ſeries of 10 years obſervations was compared with.

Theſe tables being rather inferior to Mayer's ſecond manuſcript, which are now the printed tables, it is not thought neceſſary to print them, but inſtead of that I ſhall here exhibit their elements expreſſed in the manner of Mayer's Formulæ at the end of his Theoria Lunæ, together with thoſe of Mayer's ſecond manuſcript tables, and a ſet of tables conſtructed by that able computer the late Mr. Gael Morris, being (like Dr. Bradley's) corrections upon

upon Mayer's firſt manuſcript tables made by the help of Dr. Bradley's obſervations, a few copies of which were printed and given by the author to his friends.

The epochs of the mean longitudes of the Moon, her apogee and aſcending node to the beginning of the year 1750 N. S. the Moon's acceleration being included, are ſhewn in the following table.

	Mean Long. of ☽	Mean Long. of Apog.	Mean Long. of ☊
	S. D. M. S.	S. D. M. S.	S. D. M. S.
Mayer's 1ſt manuſcript	6. 8. 22. 39	5. 20. 55. 59	9. 10. 18. 38
Mayer's 2d manuſcript	6. 8. 22. 26	5. 20. 55. 54	9. 10. 19. 8
Dr. Bradley's tables –	6. 8. 22. 20	5. 20. 55. 45	9. 10. 18. 30
Mr. Morris's tables - –	6. 8. 22. 27	5. 20. 55. 52	9. 10. 20. 0

The Maxima of the equations of the Moon's longitude are contained in the following table according to the form of that in p. 52 of Mayer's Theoria Lunæ.

Mayer's

	Mayer's 1ſt manuſcript Tables.	Mayer's printed Tables.	Dr. Bradley's Tables.	Mr. Morris's Tables.
	D. M. S.	D. M. S.	D. M. S.	D. M. S.
I.	+ 0. 11. 14 ſin. ς	+ 0. 11. 16	+ 0. 11. 14	+ 0. 11. 14
	— 0. 0. 4 ſin. 2ς	— 0. 0. 4	— 0. 0. 7	— 0. 0. 7
II.	— 0. 0. 56 ſin. $(2\omega + \varsigma)$	— 0. 0. 54	— 0 0. 56	— 0. 0. 56
III.	— 0. 1. 6 ſin. $(2\omega - \varsigma)$	— 0. 1. 9	— 0. 1. 6	— 0. 1. 10
IV.	+ 0. 0. 53 ſin. $(2\omega + \dot{p})$	+ 0. 0. 54	+ 0. 1. 0	+ 0. 1. 5
V.	— 1. 20. 36 ſin. $(2\omega - \dot{p})$	— 1. 20. 33	— 1. 20. 35	— 1. 20. 30
	+ 0. 0. 38 ſin. $(4\omega - 2\dot{p})$	+ 0. 0. 35½	+ 0. 0. 35½	+ 0. 0. 35
VI.	+ 0. 2. 0 ſin. $(2\omega - \dot{p} + \varsigma)$	+ 0. 2. 9	+ 0. 2. 0	+ 0. 2. 0
VII.	+ 0. 0. 39 ſin. $(2\omega - \dot{p} - \varsigma)$	+ 0. 0. 49	+ 0. 0. 47	+ 0. 0. 47
VIII.	+ 0. 0. 28 ſin. $(\dot{p} - \varsigma)$	+ 0. 0. 34	+ 0. 0. 28	+ 0. 0. 36
IX.	+ 0. 0. 56 ſin. $(2\omega - 2\delta)$	+ 0. 0. 56	+ 0. 0. 51	+ 0. 0. 51
X.	+ 0. 0. 16 ſin. $(\omega - \dot{p})$	+ 0. 0. 16	+ 0. 0. 16	+ 0. 0. 16
	— 0. 0. 57 ſin. $(2\omega - 2\dot{p})$	— 0. 1. 0	— 0. 1. 0	— 0. 1. 0

	Mayer's 1ſt manuſcript Tables.	Mayer's printed Tables.	Dr. Bradley's Tables.	Mr. Morris's Tables.
	D. M. S.	D. M. S.	D. M. S.	D. M. S.
XI.	— 0. 18. 11 ſin. $\tilde{p}$	— 6. 18. 15	— 6. 18. 11	— 6. 18. 12
	+ 0. 12. 52 ſin. 2 $\tilde{p}$	+ 0. 13. 0	+ 0. 13. 0	+ 0. 13. 0
	— 0. 0. 37 ſin. 3 $\tilde{p}$	— 0. 0. 37	— 0. 0. 38	— 0. 0. 38
XII	— 0. 1. 55 ſin. $\tilde{\omega}$	— 0. 1. 55	— 0. 1. 57	— 0. 1. 57
	+ 0. 35. 47 ſin. 2 $\tilde{\omega}$	+ 0. 35. 43	+ 0. 35. 47	+ 0. 35. 47
	+ 0. 0. 2 ſin. 3 $\tilde{\omega}$	+ 0. 0. 2	0. 0. 0	0. 0. 0
	+ 0. 0. 14 ſin. 4 $\tilde{\omega}$	+ 0. 0. 12	+ 0. 0. 12	+ 0. 0. 12
XIII.	+ 0. 1. 25 ſin. (2 $\tilde{\delta}$ — $\tilde{p}$)	+ 0. 1. 23	+ 0. 1. 26	+ 0. 1. 26
XIV.	— 0. 6. 51 ſin. 2 $\tilde{\delta}$	— 0. 6. 43	— 0. 6. 51	— 0. 6. 51
	ſin. (ω + ς)			— 0. 0. 15

The annual Equation of the Moon's mean Anomaly.

	+ 0. 25. 15 ſin. ς	+ 0. 23. 12	+ 0. 22. 6	+ 0. 22. 6
	— 0. 0. $15\frac{1}{2}$ ſin. 2 ς	— 0. 0. 6	— 0. 0. 14	— 0. 0. 14

	Mayer's 1ſt manuſcript Tables.	Mayer's printed Tables.	Dr. Bradley's Tables.	Mr. Morris's Tables.
	D. M. S.	D. M. S.	D. M. S.	D. M. S.
	The annual Equation of the Moon's Aſcending Node.			
	+ 0. 9. 13 ſin. ς	+ 0. 8. 50	+ 0. 9. 13	+ 0. 9. 13
	— 0. 0. $5\frac{1}{2}$ ſin. 2ς	-- 0. 0. 2	— 0. 0. $5\frac{1}{2}$	— 0. 0. $5\frac{1}{2}$
	The Equations of Latitude.			
I.	+ 5. 8. $31\frac{1}{3}$ ſin. $\tilde{\delta}$	+ 5. 8. 46	+ 5. 8. 42	+ 5. 8. 39
	— 0. 0. $5\frac{2}{3}$ ſin. 3$\tilde{\delta}$	— 0. 0. 6	— 0. 0. 6	— 0. 0. 6
II.	+ 0. 8. 47 ſin. $(2\tilde{\tilde{\varpi}}-\tilde{\delta})$	+ 0. 8. 47	+ 0. 8. 47	+ 0. 8. 47
III.	- - - - ſin. $(\tilde{\delta}-\varsigma)$	+ 0. 0. 2,0	- - - -	- - - -
IV.	— 0. 0. 21,0 ſin. $(\tilde{\delta}-\dot{p})$	— 0. 0. 17,4	— 0. 0. 16	— 0. 0. 21
V.	— 0. 0. 23,0 ſin. $(\tilde{\delta}-2\dot{p})$	— 0. 0. 24,1	— 0. 0. 25	— 0. 0. 23
VI.	+ 0. 0. 2,7 ſin. $(\tilde{\delta}-3\dot{p})$	+ 0. 0. 2,7	- - - -	- - - -
VII.	— 0. 0. 9,7 ſin. $(2\tilde{\tilde{\varpi}}-\tilde{\delta}+\varsigma)$	— 0. 0. 8,3	- - - -	— 0. 0. 10

	Mayer's 1ſt manuſcript Tables.	Mayer's printed Tables.	Dr. Bradley's Tables.	Mr. Morris's Tables.
	D. M. S.	D. M. S.	D. M. S.	D. M. S.
	The Equations of Latitude continued.			
VIII.	— 0. 0. 3,6 ſin.$(2\tilde{\varpi}-\ddot{\delta}-s)$	+ 0. 0. 3,7	- - - -	— 0. 0. $3\frac{1}{2}$
IX.	— 0. 0. 2,1 ſin.$(2\tilde{\varpi}-\ddot{\delta}+\dot{p})$	— 0. 0. 2,2	- - - -	- - - -
X.	+ 0. 0. 16,5 ſin.$(2\tilde{\varpi}-\ddot{\delta}-\dot{p})$	+ 0. 0. 15,0	+ 0. 0. 16	+ 0. 0. $16\frac{1}{2}$
XI.	— 0. 0. 6,4 ſin.$(2\tilde{\varpi}-\ddot{\delta}-2\dot{p})$ + 0. 0. 2,1 ſin.$(2\tilde{\varpi}+\ddot{\delta}-2\dot{p})$	— 0. 0. 6,0	- - - -	— 0. 0. $6\frac{1}{2}$

The Maxima of the Tables of the Moon's Equatorial Parallax are as follows.

	Mayer's 1ſt manuſcript Tables.		Mayer's printed Tables.	Dr. Bradley's Tables.	Mr. Morris's Tables.
	M. S.		M. S.	M S.	M. S.
I.	- - - -	coſin. ς	+ 0. 0, 3	- - - -	- - - -
II.	- - - -	coſ. $(2\omega+\varsigma)$	— 0. 0, 7	- - - -	- - - -
III.	- - - -	coſ. $(2\omega-\varsigma)$	— 0. 0, 8	- - - -	- - - -
IV.	- - - -	coſ. $(2\omega+\dot{p})$	+ 0. 0, 1	- - - -	- - - -
V.	— 0. 38 -	coſ. $(2\omega-\dot{p})$	— 0. 37, 3	— 0. 38	— 0. 38
	- - - -	coſ. $(4\omega-2\dot{p})$	+ 0. 0, 3	- - - -	- - - -
VI.	- - - -	coſ. $(2\omega-\dot{p}+\varsigma)$	+ 0. 1, 0	- - - -	- - - -
VII.	- - - -	coſ. $(2\omega-\dot{p}-\varsigma)$	+ 0. 0, 6	- - - -	- - - -
VIII.	- - - -	coſ. $(\dot{p}-\varsigma)$	+ 0. 0, 2	- - - -	- - - -
IX.	- - - -	coſ. $(2\omega-2\delta)$	+ 0. 0, 4	- - - -	- - - -
X.	- - - -	coſ. $(\omega-\dot{p})$	+ 0. 0, 2	- - - -	- - - -
	- - - -	coſ. $(2\omega-2\dot{p})$	+ 0. 2, 0	- - - -	- - - -

The Maxima of the Tables of the Moon's Equatorial Parallax continued.

	Mayer's 1ſt manuſcript Tables.		Mayer's printed Tables.	Dr. Bradley's Tables.	Mr. Morris's Tables.
	M. S.		M. S.	M. S.	M. S.
XI.	57. 8	- - - - -	57. 11, 0	57. 15½	57. 14
	— 3. 8	coſ. $\tilde{p}$	— 3. 7, 8	— 3. 8½	— 3. 8
	+ 0. 10	coſ. $2\tilde{p}$	+ 0. 10, 0	+ 0. 10	+ 0. 10
	- - - -	coſ. $3\tilde{p}$	— 0. 0, 2	- - - -	- - - -
XII.	— 0. 1,5	coſ. $\tilde{\omega}$	— 0. 1, 0	— 0. 1,5	— 0. 1,5
	+ 0. 27	coſ. $2\tilde{\omega}$	+ 0. 26, 0	+ 0. 27	+ 0. 27
	- - - -	coſ. $4\tilde{\omega}$	+ 0. 0, 2	- - - -	- - - -
XIII.	- - - -	coſ. $(2\tilde{\delta}-\tilde{p})$	+ 0. 0, 8	- - - -	- - - -

When the Moon's equatorial parallax is 57′. 8″. in Mayer's firſt manuſcript tables, it will be 57′. 11″. in the printed tables, 57′. 15½″. in Dr. Bradley's tables, and 57′. 14′. in Mr. Morris's tables; and at the ſame time the Moon's diameter will be given 31′. 10″. by both tables of Mayer, 31′. 14″. by Dr. Bradley's tables, and 31′. 13″. by Mr. Morris's tables.

Mayer, in conſtructing his firſt tables, ſuppoſed the ratio of the equatorial to the polar axis of the earth to be as 200 to 199, and Dr. Bradley and Mr. Morris have adopted the ſame: in Mayer's printed tables, the ratio of 231 to 230 is made uſe of.

REMARKS

ON THE

HADLEY's QUADRANT.

BY

The Rev'd NEVIL MASKELYNE, B.D.F.R.S.
ASTRONOMER ROYAL.

[G]

REMARKS, &c.

ALTHOUGH the Hadley's Quadrant, as contrived by Mr. Hadley, was equally fitted for obſerving angles from from 90° to 180° by the back-obſervation, as from 0° to 90° by the fore-obſervation, and the quadrants have accordingly been generally made with a back-horizon-glaſs as well as a fore-one to ſerve this double purpoſe, yet notwithſtanding the back-obſervation has been very little made uſe of to this time; partly owing to the difficulty of adjuſting the back-horizon-glaſs, and partly to the want of a director of the ſight, which, though recommended by Mr. Hadley, has, for I know not what reaſon, been generally omitted in the conſtruction of the inſtrument.

The difficulties of adjuſting the back-horizon-glaſs are happily lately got over by an ingenious contrivance of Mr. Dollond by means of an additional index applied to this glaſs (for which he has taken out a patent) whereby both its adjuſtments may be made by the ſame obſervations and with nearly the ſame exactneſs as thoſe of the fore-horizon-glaſs. The other impediment to the uſe of the back-obſervation, namely the want of a director of the ſight, will be removed by reſtoring it to the quadrant, or by applying a ſmall teleſcope to it, which will be more convenient and exact in celeſtial obſervations. The direction of the ſight will be rendered parallel to the plane of the quadrant by the proper conſtruction of the director; how to place the axis of the teleſcope exactly parallel to the

[G 2] plane

plane of the quadrant ſhall be ſhewn preſently; but firſt it is neceſſary to premiſe, that an adjuſting piece muſt be applied to the teleſcope for this purpoſe; that two thick parallel ſilver wires, dividing the diameter of the field of view into three equal parts, are to be placed in the focus of the eye-glaſs, which, by turning the eye-tube round about, are to be brought to appear parallel to the plane of the quadrant; and that the back-horizon-glaſs ſhould be ſilvered in the ſame manner as the fore-horizon-glaſs.

In order to adjuſt the axis of the teleſcope parallel to the plane of the quadrant proceed as follows; when the diſtance of the Moon from the Sun is greater than 90° (but the greater the better) by giving a ſweep with the quadrant and moving the index, bring the neareſt limbs to touch one another at the wire neareſt the plane of the quadrant: then, the index remaining unmoved, make the like obſervation at the wire fartheſt from the plane of the quadrant, and note whether the neareſt limbs are in contact as they were at the other wire; if they are, the axis of the teleſcope is parallel to the plane of the quadrant; but if they are not, it is inclined to the ſame, and muſt be corrected, as follows. If the neareſt limbs of the Sun and Moon ſeem to lap over one another at the wire fartheſt from the plane of the quadrant, the object end of the teleſcope is inclined from the plane of the quadrant, and muſt be altered by the adjuſtment made for that purpoſe; but if the neareſt limbs of the Sun and Moon do not come to touch one another at the wire fartheſt from the plane of the quadrant, the object end of the teleſcope is inclined towards the plane of the quadrant, and muſt be altered by the adjuſtment accordingly. Let theſe operations be repeated until the obſervation is the ſame at both the parallel wires; and the axis of the teleſcope will be adjuſted parallel to the plane of the quadrant. In like manner the axis of the teleſcope may be alſo adjuſted parallel to the plane of the quadrant for the fore-obſervation.

The two parallel wires will be very uſeful on many occaſions, as well in the fore as the back-obſervation. In taking the altitude of the Sun, Moon, or Star, direct the ſight towards the part of the horizon underneath or oppoſite to the object, according as you intend to obſerve by the fore or the back-obſervation, and hold the quadrant that the wires may conſtantly appear perpendicular to the horizon, and move the index till you ſee the object come down towards the horizon in the fore-obſervation, or up to it in the back-obſervation, and turn the inſtrument in order to bring the object between the wires; then move the index till the Sun's or Moon's limb, or the Star touch the horizon. The nearer the object is brought to an imaginary line in the middle between the wires (it is indifferent what part of the line it is brought to) and the truer the wires are kept perpendicular to the horizon, the more exact will the obſervation be. In the fore-obſervation the object appears in its real poſition; but, in the back-obſervation, the object being brought through the zenith to the horizon, the real upper limb will appear the loweſt and the contrary. Either limb of the Sun may be uſed in either obſervation, but it will be moſt convenient in general to make the Sun appear againſt the ſky and not againſt the ſea; and then, the objects appearing inverted through the teleſcope, the Sun will appear loweſt and the horizon higheſt. The obſerved altitude is to be corrected for dip, refraction, and Sun's ſemidiameter as uſual.

In taking the diſtance of the neareſt limbs of the Sun and Moon, whether in the fore or back-obſervation, having firſt ſet the index to the diſtance nearly by the help of the Nautical Almanac, and brought the Moon to appear any where on or near the diameter of the field of view of the teleſcope, which biſects the interval between the wires, give a ſweep with the quadrant, and the Sun and Moon will paſs by one another: if, in this motion, the neareſt limbs, at their neareſt approach, juſt come to touch one another without lapping over, on or near any part of the diameter of the field of the teleſcope which biſects the interval

terval between the wires, the index is rightly ſet; but if the neareſt limbs either do not come to meet, or lap over one another, alter the index and repeat the obſervation till the neareſt limbs touch one another properly. This method of obſerving will be found much more eaſy and expeditious than without the wires: ſince in that caſe it would be neceſſary to make the limbs touch very near the center of the teleſcope, but here it is only neceſſary to make them do ſo any where on or near the diameter of the field of the teleſcope which biſects the interval between the wires. The ſame method may be uſed in taking the Moon's diſtance from a fixt Star.

It may not be amiſs here to make ſome remarks on the rules that have been uſually given for obſerving the Sun's altitude both with the fore and back-obſervation, which have all been defective, and to point out the proper directions to be followed when a teleſcope is not uſed with two parallel wires to direct the quadrant perpendicular to the horizon, and to ſhew the principles on which theſe directions are founded.

Obſervers are commonly told, that, in making the fore-obſervation they ſhould move the index to bring the Sun down to the part of the horizon directly beneath him, and turn the quadrant about upon the axis of viſion, and when the Sun touches the horizon at the loweſt part of the arch deſcribed by him the quadrant will ſhew the altitude above the viſible horizon. I allow that this rule would be true, if a perſon could by ſight certainly know the part of the horizon exactly beneath the Sun; but, as this is impoſſible, the precept is incomplete. Moreover, in taking the Sun's altitude in or near the zenith, this rule intirely fails, and the beſt obſervers adviſe to hold the quadrant vertical and turn one's ſelf about upon the heel, ſtopping when the Sun glides along the horizon without cutting it: and it is certain that this is a good rule in this caſe, and capable with care of anſwering the intended purpoſe. We have thus two rules for the ſame thing, which is a proof that neither

is

is an univerſal one, or ſufficient in all caſes alone. In taking the back-obſervation, obſervers have been adviſed either to turn the quadrant about upon the axis of viſion, or holding the quadrant vertical to turn themſelves about upon the heel, indifferently. Here there is a diſtinction made between the methods of obſerving with the fore and back-obſervations, for which there is no foundation in the principles of the inſtrument. Beſides it ſeems ſtrange that two ſuch very different methods ſhould be equally preſcribed for the ſame purpoſe, ſince they cannot both be right, and perhaps neither may be ſo. The true ſtate of the caſe is this; that in taking the Sun's altitude, whether by the fore or back-obſervation, theſe two methods muſt be combined together; that is to ſay, the obſerver muſt turn the quadrant about upon the axis of viſion and at the ſame time turn himſelf about upon his heel, ſo as to keep the Sun always in that part of the horizon-glaſs which is at the ſame diſtance as the eye from the plane of the quadrant; for, unleſs the caution of obſerving the objects in the proper part of the horizon-glaſs be attended to, it is evident the angles meaſured cannot be the true ones. In this way the reflected Sun will appear to deſcribe an arch of a parallel circle round the true Sun, whoſe convex ſide will be downwards in the fore-obſervation and upwards in the back-obſervation, and conſequently when by moving the index the loweſt point of the arch in the fore-obſervation or the uppermoſt point of the arch in the back-obſervation is made to touch the horizon, the quadrant will ſtand in a vertical plane, and the altitude above the viſible horizon will be properly obſerved.

The reaſon of theſe operations may be thus explained. The image of the Sun being always kept in the axis of viſion, the index will always ſhew on the quadrant the diſtance between the Sun and any object ſeen directly which its image appears to touch; therefore, as long as the index remains unmoved, the image of the Sun will deſcribe an arch every-where equidiſtant from the Sun in the heavens, and conſequently a parallel circle about the Sun as a pole; ſuch a tranſlation of the Sun's image can only be produced by the quadrant being turned about upon a line drawn from the eye to the Sun as an axis; a motion of rotation upon this line may be conſidered as compounded of two, one upon the axis of viſion and the other upon a vertical axis; therefore the obſerver by properly combining and proportioning theſe two motions, one of the quadrant upon the axis of viſion, the other of himſelf upon his heel, keeping himſelf upright (which gives the quadrant a motion upon a vertical axis) will cauſe the image of the Sun to deſcribe a parallel circle about the Sun in the heavens without departing from the axis of viſion. If it be aſked why the obſerver ſhould be directed to perform two motions rather than the ſingle one equivalent to them on a line drawn from the eye to the Sun as an axis? I anſwer, that we are not capable, while looking towards the horizon, of judging how to turn the quadrant about upon the elevated line going to the Sun as an axis, by any other means than by combining the two motions above-mentioned, ſo as to keep the Sun's image always in the proper part of the horizon-glaſs.

When the Sun is near the horizon the line going from the eye to the Sun will not be far removed from the axis of viſion, and conſequently the principal motion of the quadrant will be performed on the axis of viſion, and the part of the motion made on the vertical axis will be but ſmall. On the contrary, when the Sun is near the zenith, the line going to the Sun is not far removed from a vertical line, and conſequently the principal motion of the quadrant will be performed on a vertical axis by the obſerver's turning himſelf about, and the part of the motion made on the axis of viſion will be but ſmall. In intermediate altitudes of the Sun, the motions of the quadrant on the axis of viſion and a vertical axis will be more equally divided. Hence appears the reaſon of the method uſed by the beſt obſervers in taking the Sun's altitude when near the zenith, by holding the quadrant vertical and turning one's ſelf about upon the heel; and the defects of the rules that have been commonly given for obſerving altitudes in other caſes.

There is a ſource of error which may affect both the fore and back-obſervations, namely, if the two ſurfaces of the index-glaſs are not exact parallel planes but inclined to one another in a ſmall angle: The rays reflected from the back-ſurface of ſuch a glaſs will not proceed in the ſame direction as they would have done if the two ſurfaces had been parallel, and the error will increaſe with the obliquity with which the rays fall on the glaſs; and therefore, in meaſuring large angles with the fore-obſervation, or ſmall angles with the back-obſervation, a ſmall defect in the parallelíſm of the planes of the two ſurfaces may produce a ſenſible error in the obſervation. It is true that this error may be removed, if the thickeſt and thinneſt edges of the glaſs be placed parallel to the plane of the quadrant, agreeable to Mr. Hadley's directions. But, as it may well be queſtioned whether this care is always taken by the inſtrument-maker, and it cannot be ſuppoſed that the glaſſes can be ground perfect parallel planes, it would certainly be an advantage acquired to the inſtrument could the error ariſing from a want of paralleliſm of the planes be removed in whatever poſition the thickeſt and thinneſt edges of the index-glaſs ſhould be placed with reſpect to the plane of the quadrant. This will be effected for celeſtial obſervations if the upper part of the index-glaſs be left unſilvered on the back and made rough and blacked, the lower part of the glaſs being ſilvered as uſual, which muſt be covered whenever any celeſtial obſervations are made. Then, if the teleſcope be ſufficiently raiſed above the plane of the quadrant, it is evident that the obſervations will be made by rays reflected from the fore-ſurface of the upper part of the index-glaſs, and conſequently if the quadrant be adjuſted by making uſe of the ſame part of the index-glaſs, the obſervations will be true whether the two ſurfaces of the glaſs are parallel planes or not. The Sun or Moon may be thus obſerved by reflection from the unſilvered parts of the index-glaſs and horizon-glaſs, ſo that a paler darkening glaſs will ſuffice, face, and they will appear much diſtincter than from an index-glaſs wholly ſilvered with a deeper darkening glaſs; for although the ſurfaces of a glaſs may be very parallel, yet there always ariſes ſome little confuſion from the double reflection. Neither will the Moon appear too weak by two unſilvered reflections, even when her creſcent is very ſmall, except ſhe ſhould be hazy or clouded or low towards the horizon; and then the light may be increaſed by lowering the teleſcope ſo as to take in part of the ſilvered reflection of the index-glaſs, which in this caſe muſt be uncovered: the ſame is alſo to be underſtood with reſpect to the Sun, ſhould his light be too much weakened by hazineſs or thin clouds.

The horizon-glaſſes ſhould be adjuſted, or the error of adjuſtment found by the Sun or Moon; the firſt will be in general the beſt object for the purpoſe; and, as the Sun or Moon ſeen directly through the unſilvered part of the horizon-glaſs will be much brighter than the image of the ſame ſeen by two unſilvered reflections, it muſt be weakened by a deep darkening glaſs placed beyond the horizon-glaſs, the reflected image being farther weakened, if neceſſary, by a paler darkening glaſs placed in the uſual manner between the index-glaſs and horizon-glaſs.

If a quadrant was deſigned principally for taking the diſtance of the Moon from the Sun and fixed Stars, and was not wanted for obſerving terreſtrial angles, it would be the beſt way to have none of the glaſſes ſilvered, but to leave both the horizon-glaſſes intirely tranſparent, and to put a red glaſs for the index-glaſs of the ſame matter with the darkening glaſſes, which would reflect light from the fore-ſurface only. The Sun's altitude might be alſo obſerved with this inſtrument, either by the fore or back-obſervation; and the altitude of the Moon might be taken with it in the night. But the altitudes of Stars could not be obſerved with it, nor the Moon's altitude in the day-time, which would however be no great inconvenience as theſe

obſervations

obſervations might well enough be ſupplied by common quadrants.

The following rules for the ſize of the glaſſes, and the ſilvering them, and the height of the teleſcope may be of uſe. The index-glaſs and two horizon-glaſſes ſhould be all of equal height, and even with one another in height both at top and bottom. The teleſcope ſhould be moveable parallel to itſelf nearer to or farther from the plane of the quadrant, and the range of its motion ſhould be ſuch that its axis, when at the loweſt ſtation, ſhould point about one tenth of an inch lower than the top of the ſilvering of the horizon-glaſſes; and when at the higheſt ſtation ſhould point to the height of the middle of the unſilvered part of the index-glaſs. The height of the glaſſes, and the quantity of the parts ſilvered and parts unſilvered, ſhould vary according to the aperture of the object-glaſs, as in the following table; where the firſt column of figures ſhews the dimenſions, in parts of an inch, anſwering to an aperture of three tenths of an inch in diameter; the ſecond column, what anſwer to an aperture of the object-glaſs of four tenths of an inch in diameter; and the third, what are ſuitable to an aperture of the object-glaſs of five tenths of an inch in diameter.

	Parts of an inch.		
Diameter of aperture of object-glaſs —	,30	0, 40	0, 50
Height of glaſſes — — — —	,90	1, 13	1, 37
Height of ſilvered part of index-glaſs —	,50	0, 63	0, 77
Height of unſilvered part of ditto — —	,40	0, 50	0, 60
Height of ſilvered part of horizon-glaſſes	,25	0, 33	0, 42
Height of unſilvered part of ditto — —	,65	0, 80	0, 95

If the teleſcope has a common object-glaſs, the firſt aperture of three tenths of an inch will be moſt convenient; but if it has an achromatic object-glaſs, one of the other apertures of four tenths or five tenths of an inch will be moſt proper. The field of view of the teleſcope ſhould be five or ſix degrees, and the objects ſhould be rendered as diſtinct as poſſible throughout the whole field by applying two eye-glaſſes to the teleſcope. The length of the index-glaſs and breadth of the horizon-glaſſes ſhould be determined as uſual according to the obliquity with which the rays fall on them, and the aperture of the object-glaſs.

I ſhall conclude this paper with ſome eaſy rules for finding the apparent angular diſtance between any two near land-objects by the Hadley's Quadrant.

To find the angular diſtance between two near objects by the fore-obſervation.—Adjuſt the fore-horizon-glaſs by the object intended to be taken as the direct object; and the angle meaſured by the fore-obſervation on the arch of the quadrant, between this object and any other object ſeen by reflection, will be the true angle between them as ſeen from the centre of the index-glaſs.—But if the quadrant be already well adjuſted by a diſtant object, and you do not chuſe to alter it by adjuſting it by a near one, move the index and bring the image of the near direct object to coincide with the ſame ſeen directly; and the number of minutes by which (*o*) of the index ſtands to the right hand of (*o*) of the quadrant upon the arch of exceſs is the correction, which added to the angle meaſured by the arch of the quadrant between this direct object and any other object ſeen by reflection, will give the true angular diſtance between them reduced to the centre of the index-glaſs.

To find the angular diſtance between two near objects by the back-obſervation.—It is ſuppoſed that the back-horizon-glaſs is truly adjuſted; if it is not, let it be ſo. Obſerve the diſtance of the objects by the back-obſervation, and take the ſupplement of the degrees and minutes ſtanding upon the arch to 180 degrees, which call the inſtrumental angular diſtance of the objects; this is to be corrected as follows. Keep the centre of the quadrant or index-glaſs in the ſame place as it had in the foregoing obſervation,

ſervation, and obſerve the diſtance between the near object, which has been juſt taken as the direct object and ſome diſtant object twice; by making both objects to be the direct and reflected ones alternately, holding the divided arch upwards in one caſe and downwards in the other, ſtill preſerving the place of the centre of the quadrant. The difference of theſe two obſervations will be the correction, which, added to the inſtrumental angular diſtance found as above in the firſt obſervation between the firſt object and any other object ſeen by reflection, will give the true angular diſtance between them reduced to the centre of the index-glaſs.

But if you ſhould happen to be in a place where you cannot command a convenient diſtant object, the following method may be uſed. The back-horizon-glaſs being adjuſted, find the inſtrumental angular diſtance between the objects; this is to be corrected by means of the following operations. Set up a mark at any convenient diſtance, oppoſite or nearly ſo to the object which has been taken as the direct object; and looking at the direct object move the index of the quadrant, and bring the image of the mark to coincide with the direct object, and read off the degrees and minutes ſtanding on the arch of the quadrant, which ſubtract from 180 degrees if (*o*) of the index falls upon the quadrantal arch, but add to 180 degrees if it falls upon the arch of exceſs, and you will have the inſtrumental angular diſtance of the objects. Invert the plane of the quadrant, taking care at the ſame time not to change the place of its centre, and looking at the ſame direct object, as before, move the index of the quadrant and bring the image of the mark again to coincide with the direct object, and read off the degrees and minutes ſtanding on the arch, and thence alſo find the inſtrumental angular diſtance of the objects. Take the ſum of this and the former inſtrumental angular diſtance; half its difference from 360 degrees will be the correction, which, added to the inſtrumental angular diſtance firſt found between the ſame direct object and the other object ſeen by reflection,

reflection, will give the true angular diſtance between them reduced to the centre of the index-glaſs. It is to be obſerved, that if the mark be ſet up at the ſame diſtance from the quadrant as the direct object is, there will be no occaſion to invert the plane of the quadrant; but the obſerver need only make the image of the mark coincide with the direct object, then turn himſelf half round, and now taking the mark for the direct object, cauſe the image of the former direct object to coincide with the mark, the divided arch of the quadrant being kept upwards, and the place of the centre of the quadrant remaining alſo the ſame in both caſes: half the difference of the ſum of the two inſtrumental angles from 360 degrees will be the correction of the adjuſtment as before.

Should only one of the objects be near and the other remote (that is to ſay half a mile diſtant or more) let the diſtant object be taken for the direct one and the near object for the reflected one, and the true diſtance of the objects as ſeen from the centre of the index-glaſs will be obtained without requiring any correction, whether it be the back or fore-obſervation that is made uſe of; only obſerving as uſual to take the ſupplement of what is ſhewn upon the arch to 180 degrees in the back-obſervation.

A
PROBLEM

TO FIND

The ERROR in the POSITION of a MERIDIANAL TELESCOPE.

BY

MR. LYONS.

A PROBLEM, &c.

LET a circumpolar ſtar be obſerved through the tranſit above and below the pole; if the difference of theſe times is juſt half a revolution of the earth round its axis (to be found by obſervations of the fixed ſtars) the tranſit is exactly in the plane of the meridian; but if it is not, take the difference between the interval of the times of the two paſſages and half a revolution, and to the logiſtic logarithm of half this difference turned into parts of a circle add the logarithmic cotangent of the ſtar's polar diſtance, and the logarithmic coſine of the latitude of the place, the ſum, rejecting 20 from the index, will be the logiſtic logarithm of the angle that the tranſit makes with the true meridian.

If the ſtar, when above the pole, comes later to the wires of the teleſcope than half a revolution after it paſſed it when below the pole, the tranſit lies to the eaſt of rhe true ſouth meridian.

To the logiſtic logarithm of the error in azimuth before found, add the logarithmic ſecant of the ſtar's altitude, and the logarithmic ſine of its polar diſtance, the ſum, rejecting 20 from the index, is the logiſtic logarithm of an arc, which turned into time will be the error of the tranſit from the true meridian at that altitude.

EXAMPLE.

Suppoſe at Cambridge (lat. 52°. 12½′.) by a clock which loſes 3′. 10″. a day on ſolar time, Capella was obſerved to paſs the hair below the pole at 6^h. 0′. at night, and the next morning to paſs it above the pole at 5^h. 56′. 21″.

	H.	M.	S.	
To the time of paſſing below the pole	6.	0.	0	
Add half a revolution or half of 23^h. 56′. 50″.	11.	58.	25	
The ſum	5.	58.	25	is the time that it would have paſſed if the teleſcope was exactly in the meridian.
But it paſſed at . . .	5.	56.	21	
The difference is . . .	0.	2.	4	

In parts of degrees 31′. 0″.	
Its half 15′. 30″. Logiſt. log. . . .	0. 5878
Cotang. polar. diſt. 44°. 15′. . .	10. 0114
Coſine lat. . . 52°. 12½′. . .	9. 7873
The ſum is the logiſtic log. of 24′. 38″.	0. 3865

Therefore the inſtrument declines 24′. 38″. to the weſt of the true ſouth meridian.

To find the error in the tranſit below the pole.

Error in azimuth. Logiſt. log. . .	0. 3865
Secant alt. 7°. 57½′. . . .	10. 0042
Sine pol. diſt. 44°. 15′.	9. 8437
The ſum is the logiſt. log. of 34′. 58″. .	0. 2344

This turned into time gives 2′. 20″. the error in the firſt obſervation, which, ſubſtracted from 6^h. 0′. 0″. gives 5^h. 57′. 40″. the time that Capella paſſed the north meridian.

To

To find the error in the tranſit above the pole.

Error in azimuth. Logiſt. log. . .	0. 3865
Secant alt. . 96°. 27½′. . . .	10. 9494
Sine pol. diſt. 44°. 15′. . . .	9. 8437
The ſum is the logiſt. log. of 3′. 58″. . .	1. 1796

This turned into time is 16″, the error in the ſecond obſervation, which, ſubtracted from 5^{h}. 56′. 21″. gives 5^{h}. 56′. 5″. the time that Capella paſſed the ſouth meridian.

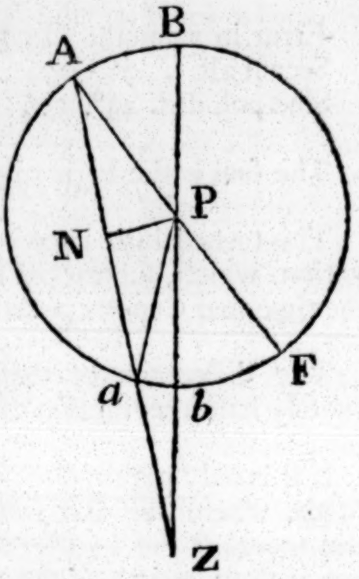
The difference of theſe times is 11^{h}. 58′. 25″. which is exactly half a revolution of the fixed ſtars ſhewn by the clock.

If it is only required to find the error of the tranſit at the altitude where the ſtar paſſes either above or below the pole, add together the logiſtic logarithm of half the difference between the interval of the two obſervations and half a revolution, the logarithmic coſine of the ſtar's polar diſtance, the logarithmic coſine of the latitude, and the logarithm ſecant of the ſtar's altitude, the ſum, rejecting 30 from the index, is the logiſtic logarithm of an arc, which, turned into time, is the error of the obſervation from the time of the true paſſage over the meridian.

In the above example.

Half difference	0°. 15′. 30″. Logiſt.log.	0. 5878
Coſine pol. diſt.	44°. 15′.	9. 8551
Coſine lat.	52°. 12½′.	9. 7873
Sec. alt. below the pole	7°. 57½′.	10. 0042
The ſum is the logiſt. log. of 34′. 58″. as before.		0. 2344

DEMONSTRATION.



Let Z be the zenith, P the pole, Z P B the meridian, Z *a* A the poſition of a tranſit inſtrument, thro' which a ſtar paſſed at *a* and A, produce A P to F, then *a* F is the difference between the interval of the two obſervations and half a revolution.

In the triangle A P *a*. S. *a* P A (=Sine *a*PF) : S. *a*AP :: (Sine A*a* : S. AP :: S. 2 A P : S. AP :: 2 Coſ. A P : Rad. ::) 2 S. AP : tang. A P.

In the right-angled triangle A P N. S. *a* A P : S. P N :: Rad. : Sin. A P.

In the right-angled triangle P N Z......S. P N : S. P Z N :: S. Z P : Rad.

Therefore ex æquo S. *a* P F : S. P Z N :: 2 S. Z P : tang. A P and $\text{P Z N} = \frac{1}{2}\,\frac{a\text{P F} \times \text{tang. A P}}{\text{S. ZP}} = \frac{1}{2}$ diff. × tang. Pol. diſt. × Sec. Lat.

In the triangle A P Z, S. P Z A : S. Z P A (S. A P B) :: S. A P ; S. Z A and $\text{A P B} = \frac{\text{P Z A} \times \text{S. Z A}}{\text{S. A P}} =$ Err. Azim. × Coſ. Alt. × Coſec. Pol. diſt.

If for P Z A we ſubſtitute its value juſt now found, we ſhall have $\text{A P B} = \frac{\frac{1}{2}\,a\text{P F} \times \text{tang. A P} \times \text{S. Z A}}{\text{S. Z P} \times \text{S. A P}} = \frac{\frac{1}{2}\,a\text{P F} \times \text{S. Z A}}{\text{S.ZP} \times \text{Coſ.AP}} = \frac{1}{2}$ diff. × Coſine Alt. × Sec. Lat. × Sec. Pol. diſt.

TWO

TWO

EXAMPLES

OF THE

Calculation of the Longitude,

FROM A

LUNAR OBSERVATION,

When the general TABLES of REFRACTION and PARALLAX are made Uſe of.

By MR. LYONS.

D.	H. M. S.	
Sept. 20 . .	4. 30. 0	Alt. ⊙ I
Long. by acc. W +	6. 0. 0	Dip. 4′.
Time at Greenw.	10. 30. 0	
		Semidian
	D. M.	
Zenith dift. . .	. 73. 34	Alt. ⊙'s
Polar dift. . . .	. 89. 17	Ar. com
Co. lat. . .	. 50. 35	Ar. comp
Sum . . .	. 213. 26.	
Half ſum . .	. 106. 43	Sine .
Diff. ½ S. & Z. D. . .	33. 9	Sine .
	34. 34½	Coſine
Apparent time .	. 69. 9	= .
Watch too ſlow .	. .	.

(2) Change for odd minut

	Red. S.	Pro. part S.	Odd min.	Cor. log.
* .	— 68 .	— 33	29	+ 452
☽ .	+ 31 .	+ 10	19	— 92
D .	— 32 .	— 20	38	+ 230
		— 43		
		3. 8		
True red.	+	2. 25		Cor. log.
			Exceſs above 53′. .	
Cor. of red.	+	6	. .	.
Cor. of diſt. 2	+	31	(3)	

The part ruled round with double lines

The figures included in parentheſes m reductions and correcting logarithms out o ſtars altitudes and d ſtance. (3) To find tl puted in the Ephemeris.

EXAMPLE I.

Diſtance of the Moon and Sun's neareſt Limbs.

		D. M.
	Alt. ⊙ L L . . .	16. 17
	Dip. 4′. Ref. 3′. .	— 7
		16. 10
	Semidiameter . .	+ 16
	Alt. ⊙'s cent. . .	16. 26
	Ar. comp. ſine .	0. 00003
	Ar. comp. ſine .	0. 11207
	Sine	9. 98125
9	Sine	9. 73785
		19. 83120
$\frac{1}{2}$	Coſine	9. 91560
		H. M. S.
9	= . . .	4. 36. 36
.	. . .	6. 36

	D. M.
Declin.	0. 53 N
Change in $10\frac{1}{2}^{h}$ . .	—10
	0. 43

	D. M.
Alt. ☽ . .	34. 7
Dip. . . .	— 4
Semidiam.	+ 16
	34. 19

	D. M.
*	16. 17
Dip . .	— 4
	+ 16
	16. 29

	H. M. S.
Time by watch	4. 30. 0
Watch too ſlow	+ 6. 36
Apparent time	4. 36. 36
Long. by account . . .	+ 6. 0. 0
Suppoſed time at Greenwich	10. 36. 36

	M. S.
Hor. par. . .	60. 9
Change in $10\frac{1}{2}^{h}$.	— 7
	60. 2

	D. M. S.
Obſerved diſtance	58. 5. 20
Semidiam. ☽ + 9″ . . .	+ 16. 30
Semidiam. ⊙	+ 16. 0
Central diſt.	58. 37. 50
Cor. of diſt. (3)	+ 2. 31
True diſt.	58. 40. 21
Diſt. at 9^{h}	57. 11. 8
(4)	
. . . at 12^{h}	58. 52. 23
Diff. from 9^{h}	1. 29. 13
Change in 3^{h}	1. 41. 15
	H. M. S.
	2. 38. 37
	9. 0. 0
Time at Greenwich	11. 38. 37
—— at the Ship	4. 36. 36
Longitude W	7. 2. 1

(1)

D 58° ☽ 34° * 16°

Red.	Cor. log.
. . . + 3′. 8″	+ 1502
* + 1°. 2. 0	1954
☽ + 1°. 3. 39	1410
D + 1°. 2. 36	1732

Prop. log. . .	3048
Prop. log. . . .	2499
. . . .	549

= 105°. 30¼′

odd minutes.

Cor. log.		Pro. part
+ 452	. . . .	+ 218
— 92	. . . .	— 30
+ 230	. . . .	+ 132
		+ 320
		1502
Cor. log.	. . .	+ 1822
ove 53′. . .	7′. 2″. . .	107
	. .	+ 1929

ouble lines is the calculation of the time to find the error of the watch.

renthefes mark the order in which the reſt of the computations ſhould be made. (1) To take the ithms out of the general table. (2) To find the proportional parts for odd minutes of the moon and) To find the true diſtance. (4) To find the longitude of the ſhip from this diſtance and thoſe com-

EXAMPLE

1767. Diſtance of the Moon's Eaſtern Limb and α Pegaſi.

D.	H. M. S.		D. M.	
Sept. 5	4. 59. 32	Alt. ⊙ L L . .	10. 29	Decl'n. . .
Long. by acc. E —	4. 18. 8	Dip. 3′. Refr. 5′. .	— 8	Change in ¾h
Time at Greenw. .	0. 41. 24		10. 21	
		Semidiameter . . .	+ 16	
	D.M.			
Zenith diſt.	79. 23	Alt. ⊙'s cent. . .	10. 37	Time by wa
Polar diſt.	96. 49	Ar. comp. ſine .	0. 00308	Watch too
Co. lat.	72. 30	Ar. comp. ſine .	0. 02058	
				Apparent ti
Sum	248. 42			Long. by ac
Half ſum	124. 21	Sine	9. 91677	Suppoſed ti
Diff. ½ S. &Z. D. . .	44. 58	Sine	9. 84923	Obſerved d
			19. 78966	Semidiamet
	38. 17	Coſine	9. 89483	Semidiamet
			H. M. S.	
Apparent time . . .	76. 34	=	5. 6. 16	Central diſt
Watch too ſlow		. . . .	6. 44	Cor. of diſt

(2)	Change for odd minutes.				True diſt.
					(4)
Red. S.	Pro.part S.	Odd min.	Cor. log.	Pro. part	Diſt. at 9h
					. . . at 12h
* . + 63	. . + 6	6	— 16	— 1	
☽ — 46	. . — 8	12	+ 15	+ 3	Diff. from
D — 18	. . — 9	31	+ 5	+ 3	Change in
	— 11			+ 5	
	27. 5			269	
True red. — 26. 54			Cor. log.	— 274	Time at G
			Exceſs above 53′ . . . 7′. 32″. .	77	—— at th
Cor. of red. — 4. 1		. . . . .		— 351	Longitude
Cor. of diſt. — 30. 55		(3)			

The part ruled round with double lines is the calculation of the time to fi

The figures included in parentheſes mark the order in which the reſt
reductions and correcting logarithms out of the general table. (2) To find
ſtars altitudes and diſtance. (3) To find the true diſtance. (4) To find th
puted in the Ephemeris.

P L E II.

α Pegaſi. See Requiſite Table, p. 160.

	D.M.		D. M.		D.M.
cl'n.	6. 50N	Alt. ☽ . .	12. 59	*	33. 9
ange in $\frac{3}{4}^{h}$, .	— 1	Dip . . .	— 3	Dip . . .	— 3
		Semidiam.	+ 16		
	6. 49		13. 12		33. 6

	H. M. S.		M. S.
Time by watch	15. 0. 38	Hor. par.	60. 11
Watch too ſlow	+ 6. 44	Change in 11^{h}. .	+ 21
Apparent time	15. 7. 22		60. 32
Long. by account E. . . .	4. 18. 8		
Suppoſed time at Greenwich	10. 49. 14		
	D. M. S.	(1)	
Obſerved diſt.	44. 47. 51	D 44° ☽ 13°	* 33°
Semidiameter ☽ + 4' . .	— 16. 33	Red.	Cor. log.
Semidiameter ☉		. . . — 27'. 5''	— 269
Central diſt.	44. 31. 18	* + 1°. 28'. 8''	253
Cor. of diſt. (3)	— 30. 55	☽ + 1°. 26'. 19''	284
True diſt.	44. 0. 23	D + 1°. 26'. 47''	274
(4)			
Diſt. at 9^{h}	45. 6. 40		
. . . at 12^{h}	43. 24. 24		
Diff. from 9^{h}	1. 6. 17	Prop. log.	4339
Change in 3^{h}	1. 42. 16	Prop. log.	2455
	H. M. S.		
	1. 56. 38	. . . .	1884
	9. 0. 0		
Time at Greenwich . . .	10. 56. 38		
—— at the Ship	15. 7. 22		
Longitude	4. 10. 44	= 62°. 41' E.	

e time to find the error of the watch.

n the reſt of the computations ſhould be made. (1) To take the
) To find the proportional parts for odd minutes of the moon and
To find the longitude of the ſhip from this diſtance and thoſe com-

WORKS publiſhed by the COMMISSIONERS OF LONGITUDE, and ſold by *John Nourſe* in the *Strand*, and Meſſieurs *Mount* and *Page* on *Tower-hill*.

I. THE NAUTICAL ALMANACS of 1767, 1768, 1769, 1770, 1771, 1772, 1773, and 1774.

II. TABLES requiſite to be uſed with the NAUTICAL ALMANAC.

III. PRINCIPLES of Mr. JOHN HARRISON's WATCH, with PLATES of the ſame.

IV. An ACCOUNT of the Going of Mr. JOHN HARRISON's Watch at the ROYAL OBSERVATORY.

V. The METHOD of Conſtructing MURAL QUADRANTS, exemplified by a Deſcription of the BRASS MURAL QUADRANT in the ROYAL OBSERVATORY at *Greenwich:* To which is added, The METHOD of dividing Aſtronomical Inſtruments; by Mr. JOHN BIRD, Mathematical-Inſtrument-Maker.

VI. TABULÆ MOTUUM SOLIS ET LUNÆ NOVÆ ET CORRECTÆ, AUCTORE TOBIA MAYER: Or, NEW AND CORRECT TABLES OF THE MOTIONS OF THE SUN AND MOON, BY TOBIAS MAYER.

VII. THEORIA LUNÆ JUXTA SYSTEMA NEWTONIANUM, AUCTORE TOBIA MAYER.

N.B.

N. B. To the Nautical Almanac of 1769 are annexed Inſtructions relative to the Obſervation of the Tranſit of Venus over the Sun's Diſk on June 3d, 1769: And to the Nautical Almanac of 1771 are added Tables for finding the Latitude from Two obſerved Altitudes of the Sun, with the Interval of Time, meaſured by a Watch; and new Tables for computing the Eclipſes of Jupiter's Third Satellite: And to the Nautical Almanac of 1772 are annexed Two Methods for clearing the apparent Diſtance of the Moon from the Sun or a fixed Star of the Effect of Refraction and Parallax; and the Solution of a Problem in Mercator's Navigation: And to the Nautical Almanac of 1773 is added, A new Table of Equations to equal Altitudes; alſo, A Catalogue of the Places of 387 Fix'd Stars, in Right Aſcenſion, Declination, Longitude, and Latitude, adapted to the Year 1770, with their Magnitudes and annual Variations in Right Aſcenſion and Declination, calculated from the late Dr. *Bradley*'s Obſervations: And to the Nautical Almanac of 1774 are added, The Reſult of a Series of 10 Years Lunar Obſervations of Dr. *Bradley*, compared with a Set of manuſcript Tables; Elements of Lunar Tables and Remarks on the Hadley's Quadrant, by the Aſtronomer Royal; a Problem for finding the Error in the Poſition of a Tranſit Teleſcope, and Two Examples of the Calculation of the Longitude from a Lunar Obſervation, *&c.* by Mr. *Lyons*.